

SAMSUNG

UMTS TELEPHONE

SGH-I607

SERVICE *Manual*

UMTS TELEPHONE



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**SAMSUNG
ELECTRONICS**



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10. Reference data

1. Safety Precautions

1-1. Repair Precaution

- Repair in Shield Box, during detailed tuning.
Take specially care of tuning or test, because the specification of cellular phone is sensitive for surrounding interference(RF noise).
- Be careful to use a kind of magnetic object or tool, because performance of parts is damaged by the influence of magnetic force.
- Surely use a standard screwdriver when you disassemble this product, otherwise screw will be worn away.
- Use a thicken twisted wire when you measure level.
A thicken twisted wire has low resistance, therefore error of measurement is few.
- Repair after separate Test Pack and Set because for short danger (for example an overcurrent and furious flames of parts etc) when you repair board in condition of connecting Test Pack and tuning on.
- Take specially care of soldering, because Land of PCB is small and weak in heat.
- Surely tune on/off while using AC power plug, because a repair of battery charger is dangerous when tuning ON/OFF PBA and Connector after disassembling charger.
- Don't use as you pleases after change other material than replacement registered on SEC System.
Otherwise engineer in charge isn't charged with problem that you don't keep this rules.

1-2. ESD(Electrostatically Sensitive Devices) Precaution

Several semiconductor may be damaged easily by static electricity. Such parts are called by ESD (Electrostatically Sensitive Devices), for example IC,BGA chip etc. Read Precaution below.

You can prevent from ESD damage by static electricity.

- Remove static electricity remained your body before you touch semiconductor or parts with semiconductor. There are ways that you touch an earthed place or wear static electricity prevention string on wrist.
- Use earthed soldering steel when you connect or disconnect ESD.
- Use soldering removing tool to break static electricity. , otherwise ESD will be damaged by static electricity.
- Don't unpack until you set up ESD on product. Because most of ESD are packed by box and aluminum plate to have conductive power,they are prevented from static electricity.
- You must maintain electric contact between ESD and place due to be set up until ESD is connected completely to the proper place or a circuit board.

2. Specification

2-1. GSM General Specification

	GSM 850	EGSM 900	DCS1800	PCS1900	W-CDMA 850	W-CDMA 1900
Freq. Band[MHz] Uplink/Downlink	824~849 869~894	880~915 925~960	1710~1785 1805~1880	1850~1910 1930~1990	824~849 869~894	1850~1910 1930~1990
ARFCN range	128~25	0~124 & 975~1023	512~885	512~810	UL:4132~4233 DL:4357~4458	UL:9262~9538 DL:9662~9938
Tx/Rx spacing	45MHz	45MHz	95MHz	80MHz	45MHz	80MHz
Mod. Bit rate/ Bit Period	270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us	270.833kbps 3.692us	3.84Mcps	3.84Mcps
Time Slot Period/Frame Period	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms	576.9us 4.615ms	Frame length : 10ms Slot length : 0.667ms	Frame length : 10ms Slot length : 0.667ms
Modulation	0.3GMSK	0.3GMSK	0.3GMSK	0.3GMSK	QPSK HQPSK	QPSK HQPSK
MS Power	33dBm~5dBm	33dBm~5dBm	30dBm~0dBm	30dBm~0dBm	24dBm ~ -50dBm	24dBm ~ -50dBm
Power Class	4 (max +33dBm)	4 (max +33dBm)	1 (max +30dBm)	1 (max +30dBm)	3 (max +24dBm)	3 (max +24dBm)
Sensitivity	-102dBm	-102dBm	-100dBm	-100dBm	-106.7dBm	-106.7dBm
TDMA Mux	8	8	8	8		
Cell Radius	35Km	35Km	2Km	2Km	2Km	2Km

2-2. GSM TX power class

TX Power control level	GSM850 GSM900	TX Power control level	DCS1800	TX Power control level	PCS1900
5	33±2 dBm	0	30±3 dBm	0	30±3 dBm
6	31±2 dBm	1	28±3 dBm	1	28±3 dBm
7	29±2 dBm	2	26±3 dBm	2	26±3 dBm
8	27±2 dBm	3	24±3 dBm	3	24±3 dBm
9	25±2 dBm	4	22±3 dBm	4	22±3 dBm
10	23±2 dBm	5	20±3 dBm	5	20±3 dBm
11	21±2 dBm	6	18±3 dBm	6	18±3 dBm
12	19±2 dBm	7	16±3 dBm	7	16±3 dBm
13	17±2 dBm	8	14±3 dBm	8	14±3 dBm
14	15±2 dBm	9	12±4 dBm	9	12±4 dBm
15	13±2 dBm	10	10±4 dBm	10	10±4 dBm
16	11±3 dBm	11	8±4 dBm	11	8±4 dBm
17	9±3 dBm	12	6±4 dBm	12	6±4 dBm
18	7±3 dBm	13	4±4 dBm	13	4±4 dBm
19	5±3 dBm	14	2±5 dBm	14	2±5 dBm
		15	0±5 dBm	15	0±5 dBm

3. Product Function

Main Function

- ☐ PIM – Calendar, Contacts, Tasks, Voice Notes
- ☐ Messaging – SMS, MMS, E-Mail, Instant Messaging
- ☐ ActiveSync
- ☐ Cingular Applications – Cingular Video, MusicID, The Buzz, Streaming Music
- ☐ Multimedia capability – Windows Media Player, Camera, Camcorder
- ☐ Wireless capability – Bluetooth
- ☐ Internet Explorer
- ☐ Accessory Applications – Alarms, Calculator, D-Day, Notepad, Smart Converter, Stopwatch, World Clock, Smart Search, Task Manager
- ☐ Java
- ☐ RSS Reader
- ☐ Pictel Viewer
- ☐ File Explorer, My Stuff
- ☐ Name Card
- ☐ Photo Caller ID
- ☐ Speaker Phone capability

4. Array course control

4-1. Equipment for Software Download

- There is 2 set to download the binary image into your device.

[First set]



1. JIG (GH99-20422A)
2. USB Cable
3. Test Cable(GH39-00558A): JIG to phone
4. Power Cable: JIG to power supply
5. Serial Cable: PC to JIG
6. Power Supply

[Second Set]



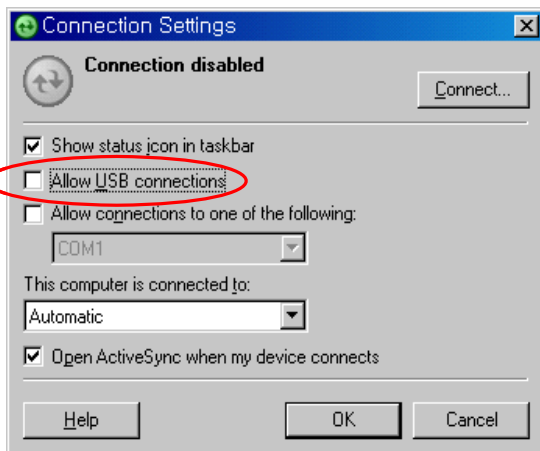
1. USB DATA Link Cable(PCB200BBE)
2. Battery

4-2. Software Download

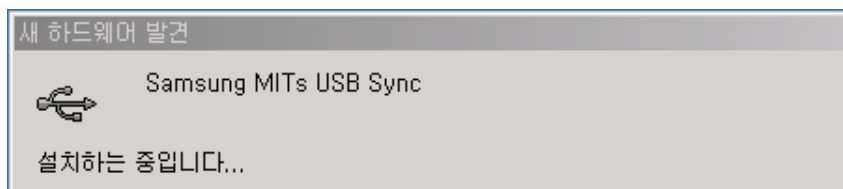
4-2-1. Pre-requisite for Download

- Downloader Program (there is 3 ways to download.)
 - [WCEDownloader v1.3Single.exe](#)
 - [WCEDownloader v1.3.exe \(multidownloader\)](#)
 - [\[unknown\].exe](#)
- SGH_I607 Mobile Device
- Binary files
- Active sync Setting
- Driver Installation.

4-2-2. Active sync setting and Driver Installation



- Make sure that the active sync program is checked before connecting your device to the host computer.
- If the active sync program is working in your computer, Make sure that check box, **Allow USB connection** at the Connection Setting, is released.
- Press 'OK' button to save a configuration.

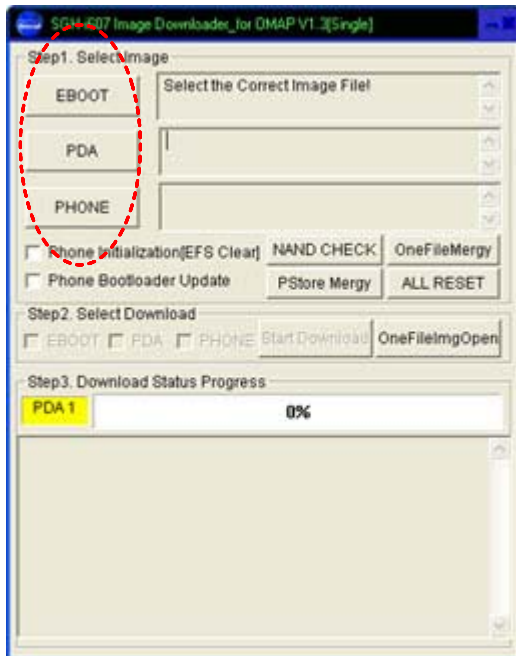


- You can see the next picture if usb driver is not installed when you try to connect the device to the host computer.
- You have to install the file which is name of '**wceusbsh.inf**' when you select the driver.

4-2-3. S/W Download Process

Single Download ([WCEDownloader v1.3Single.exe](#))

- How to connect the device to your host computer.



- Make sure that '**SAMSUNG Composite USB Driver**' should be installed in your computer.
- Connect your device to the host computer by using **MSM USB cable**.
- Select the binary files by using Eboot, PDA and PHONE buttons.



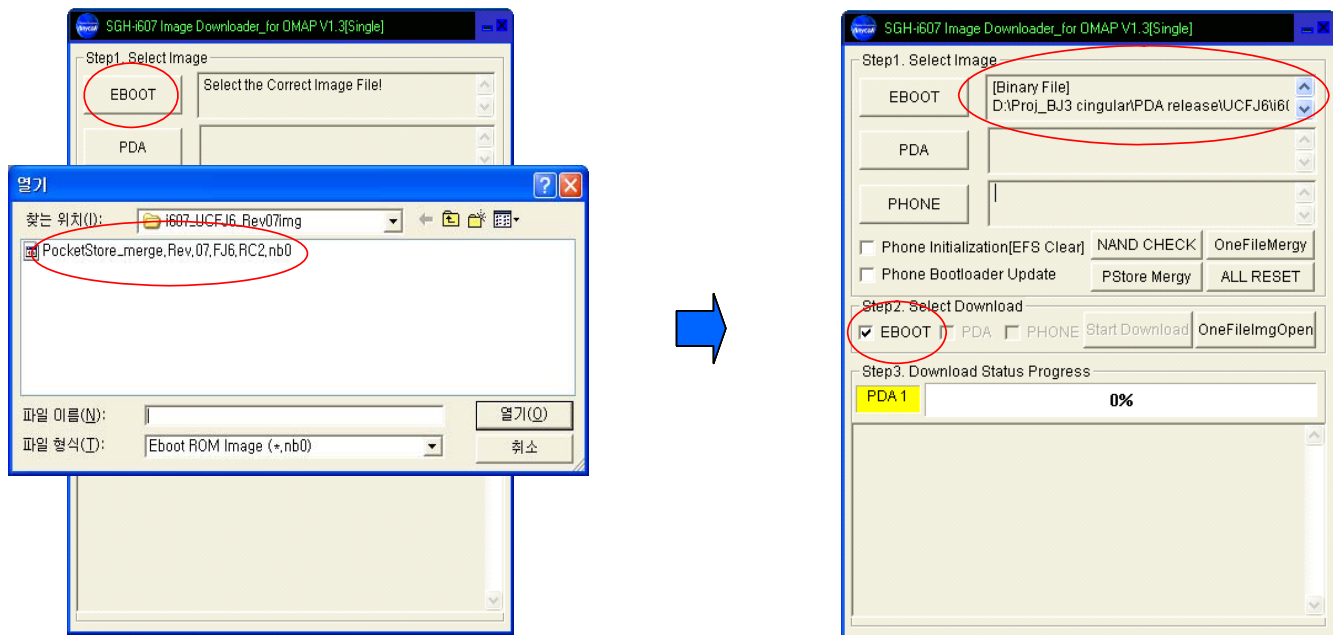
-Turn on your device to enter download mode when you press on Camera key and Soft 2 key simultaneously..



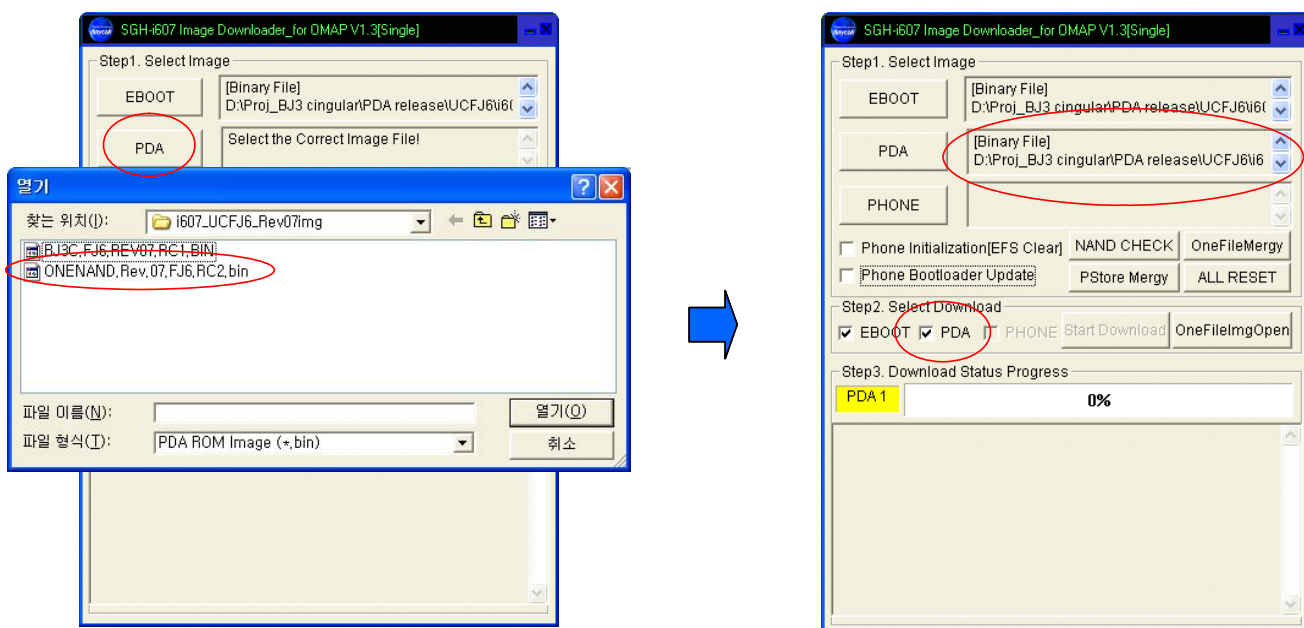
- You can see the upper picture when the connection is failed.
- retry to connect the device with your host computer.

- Load the binary download program by executing the
 “WCEDownloader v1.3Single.exe”

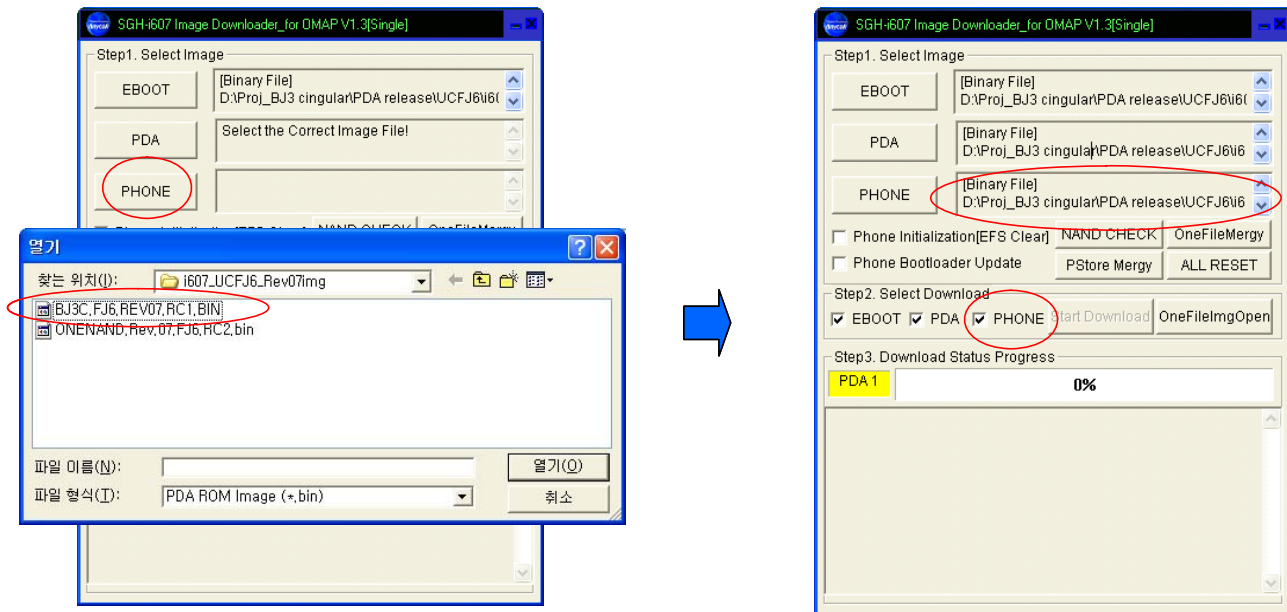
1. First select the bootloader image by clicking the EBOOT button. The Eboot Checkbox will be activated.



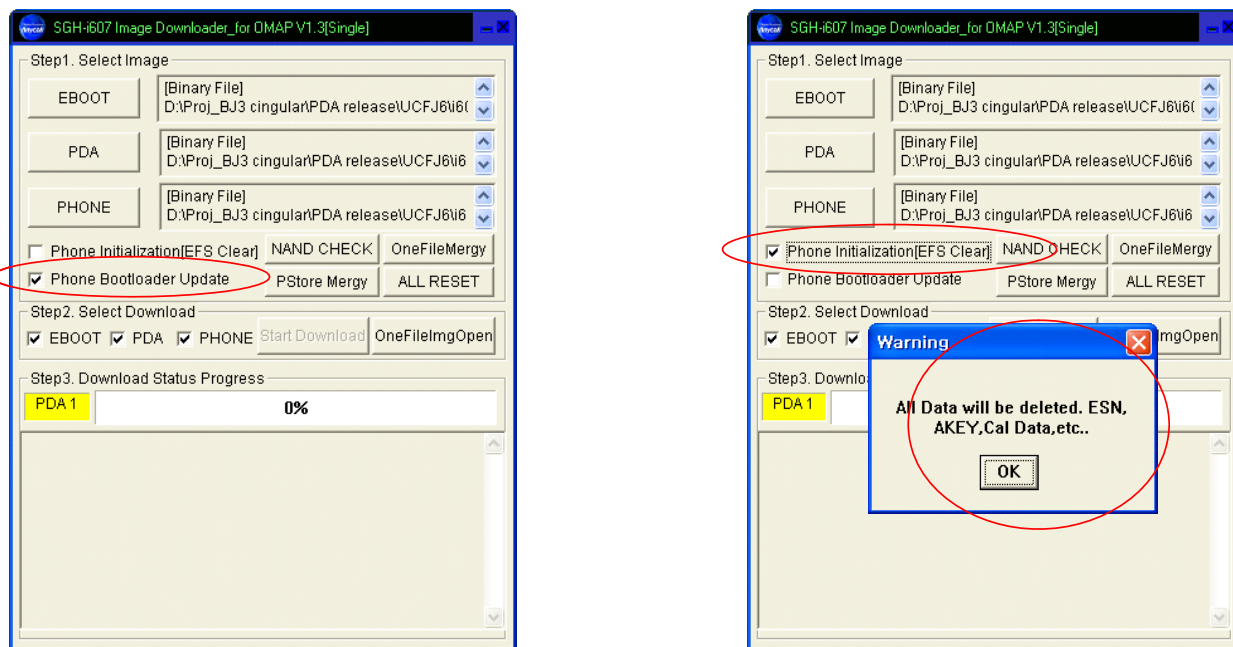
2. Click the PDA Button to select the PDA image, then the PDA checkbox will be activated.



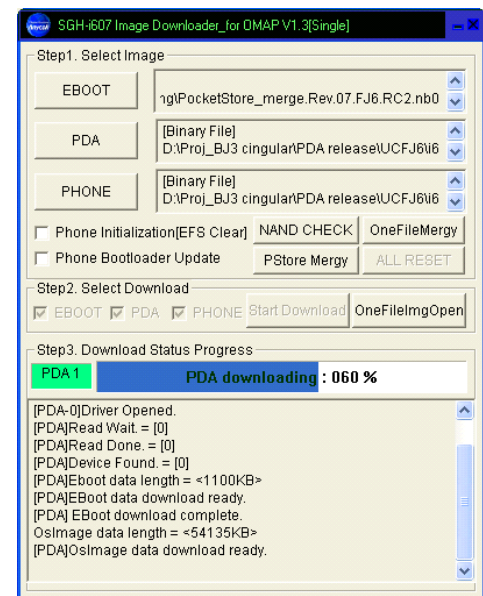
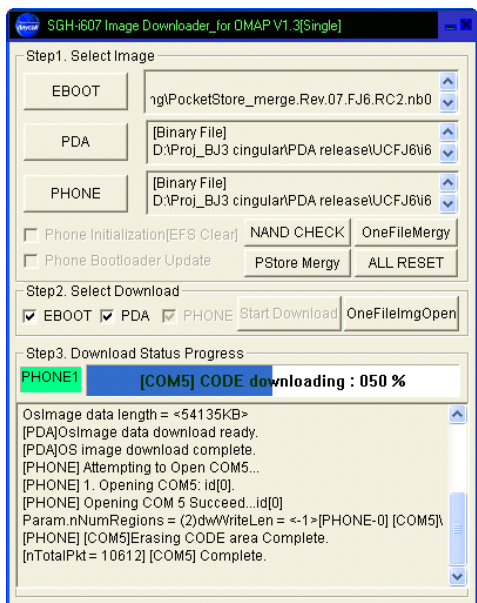
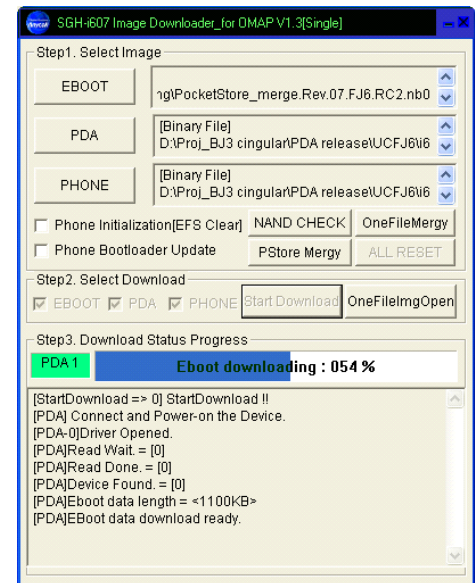
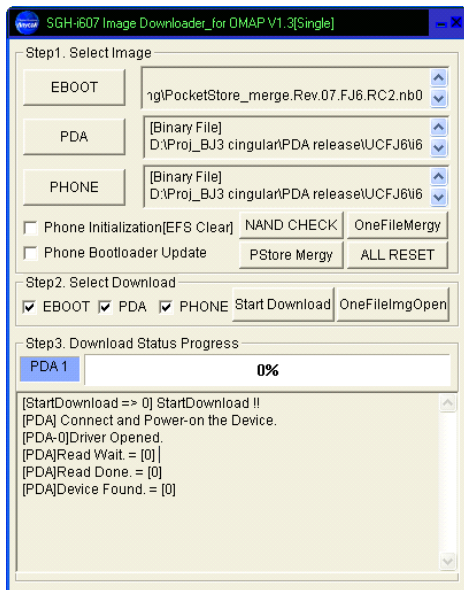
- Click the PHONE Button to select the PHONE image, then the PHONE checkbox will be activated.



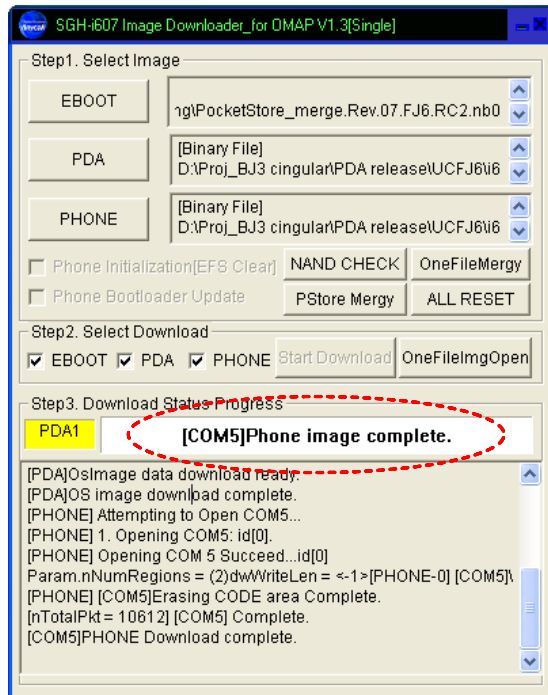
- If you need to update phone bootloader, you should check the 'Phone Bootloader Update' checkbox. So does 'EFS Clear'.



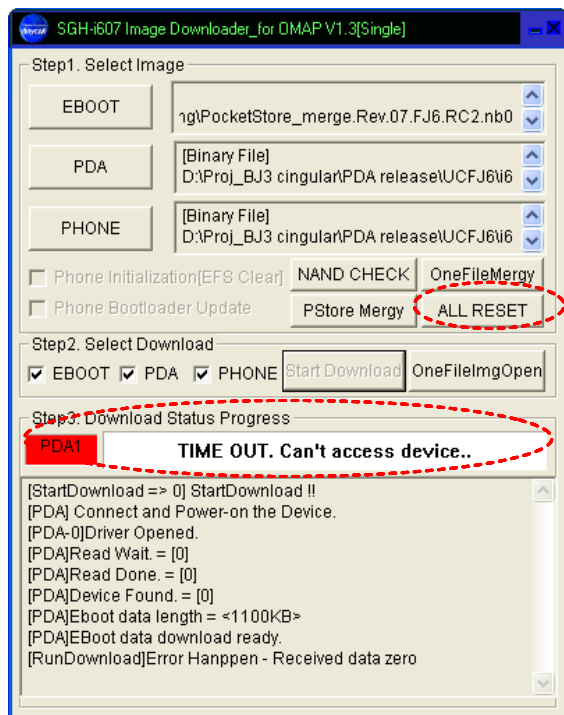
5. If the device connected with the host PC, the color of progress bar will be changed with blue. In that time, You can push the start button to download the binary image.



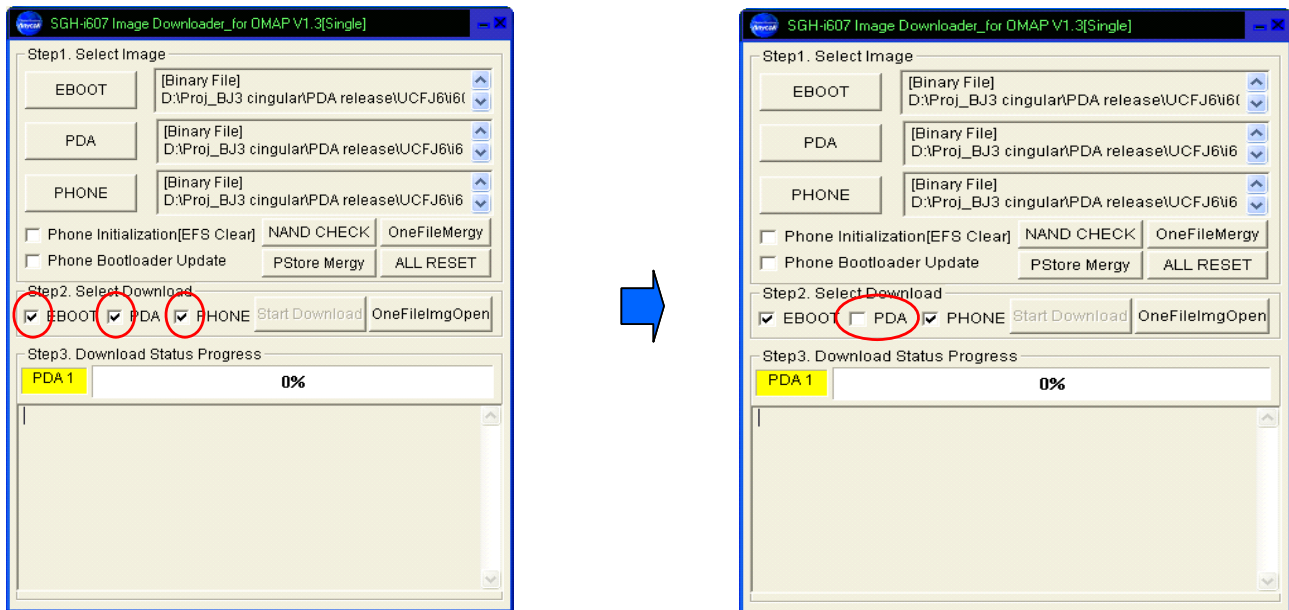
6. You can see the below picture, when it is done. And the device will be rebooted. If your device is turned on successfully, every downloading procedure is finished.



7. If some error occurs, You have to restart download program or push the all reset button.

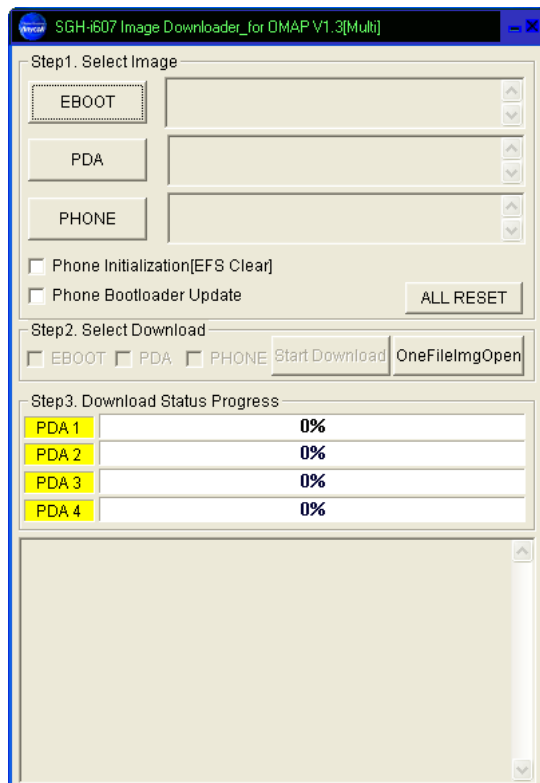


8. If you want to omit to download PDA image, you can release the PDA check box. And Eboot, Phone download are the same as this.



4-2-4. Multi Download (WCEDownloader v1.3.exe (multidownloader))

■ Multi-download is almost same as single download.

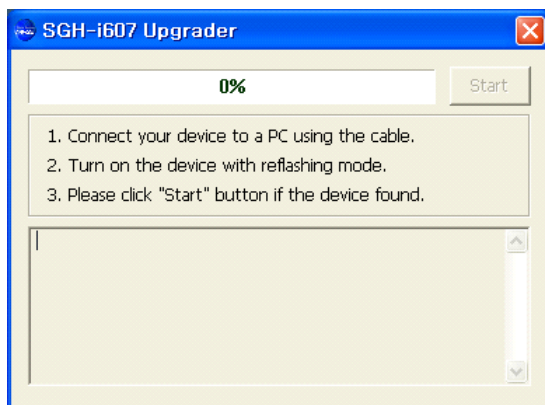


■ The difference is below.

1. There is four progress bars. It means you can download four devices at once.
2. The device will be rebooted automatically after download. In that time, 'MITs USB RNDIS Driver' is not detected in the host PC. It means you can't use the active sync program. So Make sure that you have to restart the device after first booting.

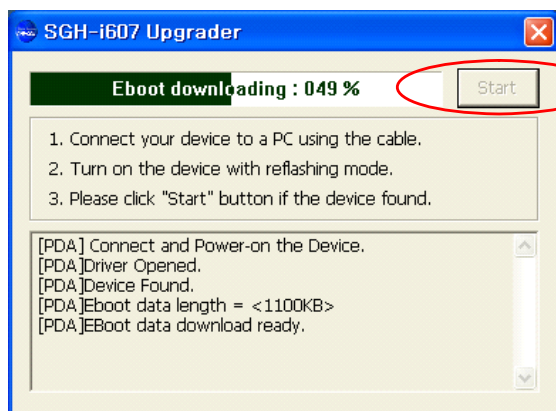
4-2-5. USER ROM Upgrader ([unknown].exe)

■ This program is to update user's device.



■ Execute the "[unknown].exe"

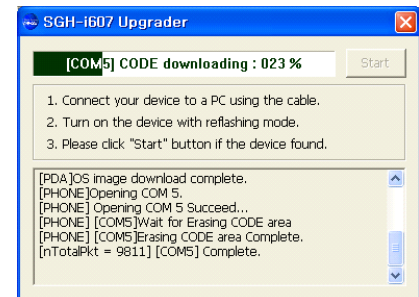
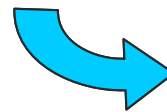
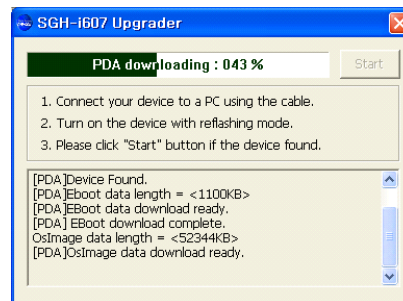
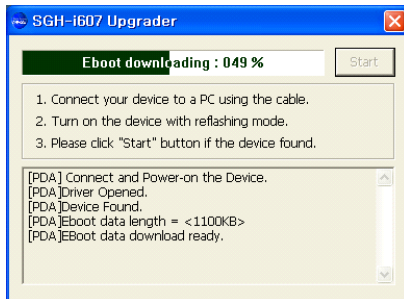
1. Connect with the host PC.



- If the connection is succeeded, 'Start' button will be activated.

- Press 'Start' button to upgrade your ROM image.

2. Download Procedure



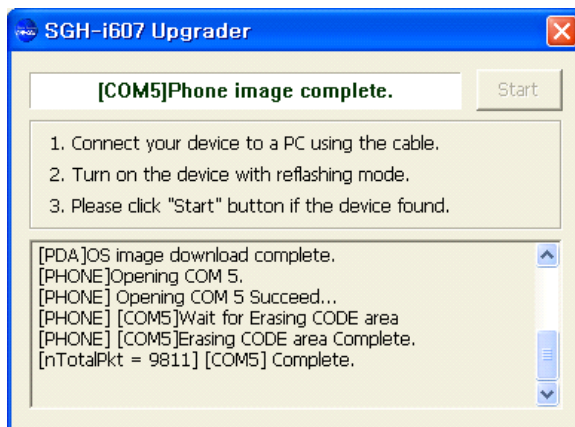
1. 'Eboot' Downloading.

2. 'PDA' Downloading.

3. 'PHONE' Downloading.

◆ If Some errors happen, you must download again

3. Download is completed.

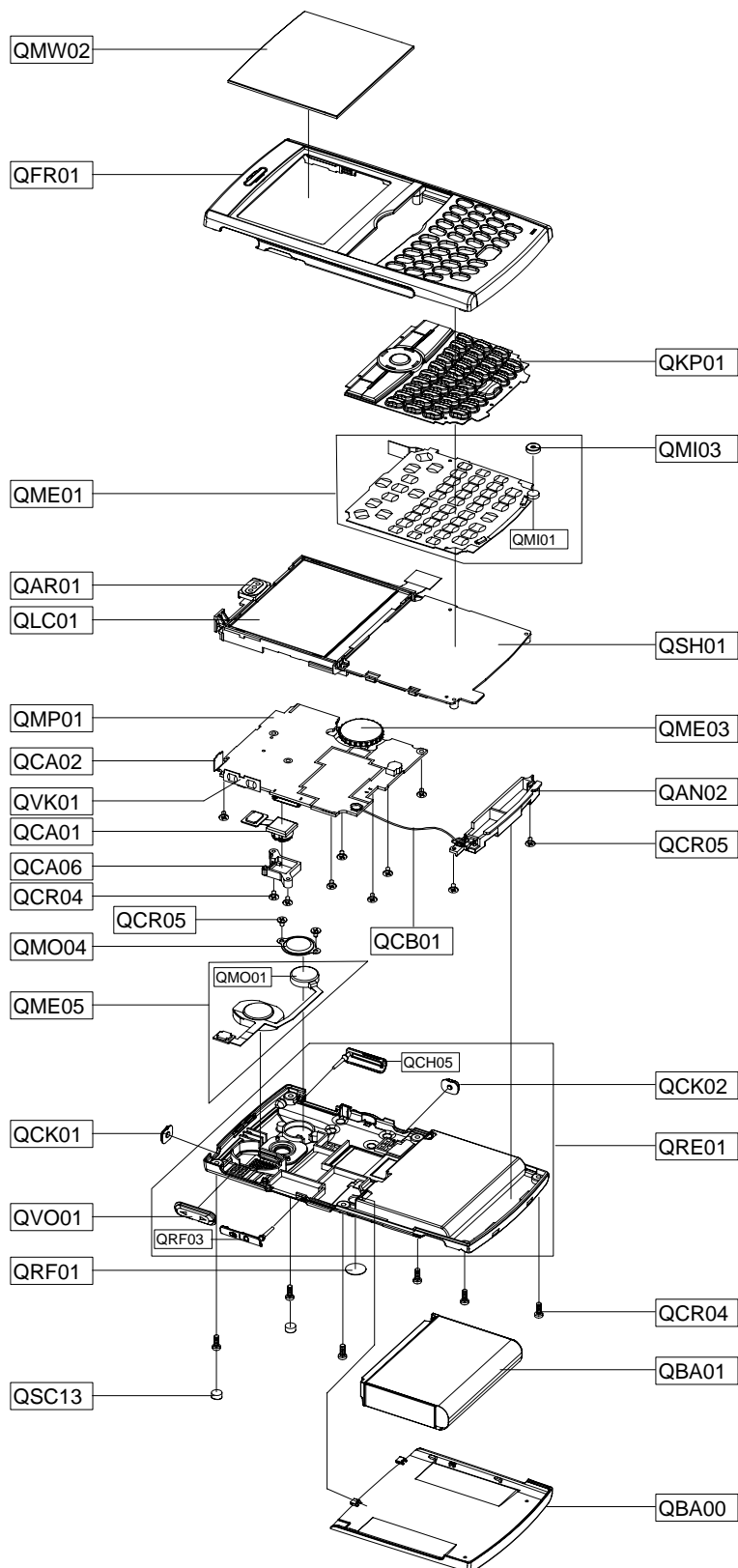


• You can see the next picture when it is done. And the Device will be rebooted.

• If your device is turned on successfully, every downloading procedure is finished.

5. Exploded View/Disassembly&Assembly Instructions

5-1. Cellular phone Exploded View



5-2. Cellular phone Parts list

Design LOC		Description	SEC CODE
QAN02		INTENNA-SGHI607	GH42-01021A
QAR01		AUDIO-RECEIVER	3009-001235
QBA00		ASSY COVER-BATTERY	GH98-02528A
QBA01		INNER BATTERY PACK-1200MAH,BLK	GH43-02669A
QCA01		UNIT-CAMERA	GH59-03632A
QCA02		UNIT-F.P.C (P/K) ASSY	GH59-03752A
QCA06		NDC-BRACKET CAMERA	GH71-06830A
QCB01		CBF COAXIAL CABLE-SGHI607 ANTE	GH39-00694A
QCK01		PMO-POWER KEY	GH72-34384A
QCK02		PMO-BACK KEY V2	GH72-33475A
QCR04		SCREW-MACHINE	6001-001479
QCR04		SCREW-MACHINE	6001-001479
QCR05		SCREW-MACHINE	6001-001478
QCR05		SCREW-MACHINE	6001-001478
QFR01		ASSY CASE-FRONT	GH98-02079A
QKP01		ASSY KEYPAD-(EU/BLK)	GH98-02542A
QLC01		LCD-MODULE	GH07-00985A
QME03		UNIT-JOG SWITCH ASSY	GH59-03741A
QMI03		RMO-RUBBER MIC	GH73-06978A
QMO04		ICT-BRACKET MOTOR	GH70-01635A
QMP01		PBA MAIN-SGHI607	GH92-03047A
QMW02		PCT-COVER MAIN WINDOW	GH72-30531A
QRF01		MPR-TAPE RF PC SHEET	GH74-24522A
QSC13		RMO-RUBBER COVER REAR SCREW	GH73-07404A
QSH01		ASSY BRACKET-SHILD	GH98-02541A
QVK01		UNIT-F.P.C(V/K)ASSY	GH59-03736A
QVO01		PMO-VOL KEY V2	GH72-33476A
QME01		UNIT-KEY FPCB ASSY	GH59-03747A
	QMI01	AS-SGHI607 MIC	GH81-06077A
QRE01		ASSY CASE-REAR	GH98-02080A
	QRF03	PMO-COVER EAR V3	GH72-33478A
	QCH05	PMO-COVER T FLASH V2	GH72-33479A
QME05		UNIT-SPEAKER,MOTOR FPCB ASSY	GH59-03753A
	QMO01	AS-SGHI607 MOTOR	GH81-06078A

Description	Sec Code
BAG PE	6902-000634
CBF INTERFACE-DATA LINK CABLE	GH39-00444A
ADAPTOR-SGHE690,BLK,USA	GH44-01363A
CHARGER-BATTERY CHARGER	GH44-01553A
S/W CD-SGHI607 COMPANION CD	GH46-00336A
LABEL(R)-WATER SOAK T_MOBILE	GH68-05914A
LABEL(P)-UNIT BARCODE CIN	GH68-09418A
MANUAL USERS-GSG	GH68-12541A
LABEL(R)-MAIN(CIN)	GH68-12742A
LABEL-QUALCOMM	GH68-12830A
MANUAL USERS-QSG PARENTAL CONT	GH68-12921A
MANUAL USERS-QSG NAPSTER PROMO	GH68-12922A
MANUAL USERS-WELCOME STICKER	GH68-12923A
BOX-UNIT(CIN)	GH69-04560A
CUSHION-CASE(NEW)	GH69-04564A
MPR-TAPE PBA JTAG	GH74-17791A
MPR-TAPE LCD ESD MASK B	GH74-19596A
MPR-TAPE MASKING HALL IC	GH74-22078A
MPR-TAPE MAIN WINDOW	GH74-22812A
MPR-VINYL BOHO MAIN WINDOW	GH74-26787A
MPR-VINYL BOHO WINDOW BOTTOM	GH74-26788A
MPR-SPONGE LCD CON	GH74-26981A
MPR-GASK TAPE KEY FPCB	GH74-27630A
MPR-VINYL BOHO MAIN WINDOW	GH74-28092A
AS-SPEAKER FPCB ASSY	GH81-06080A

5-3. Disassembly and Assembly Instructions

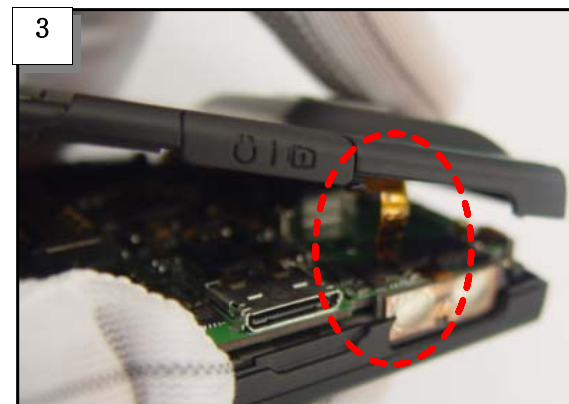
— Disassembly SET-Rear



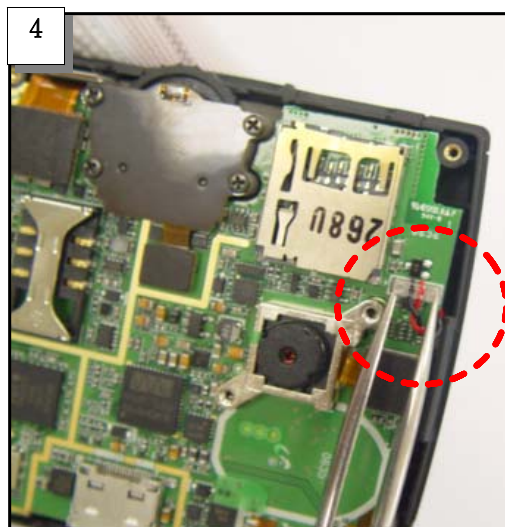
1. Unscrew six points in the Rear case.



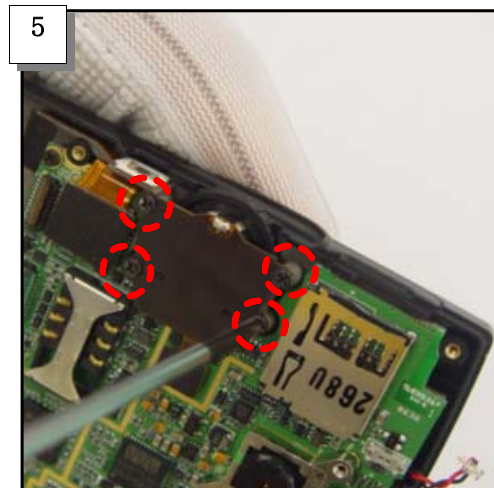
2. Disjoin the Rear case from the lower part of the SET.



3. Disjoin SPK-MOTOR CONNECTOR.
(Notice that the F-PCB should not be in damage.)

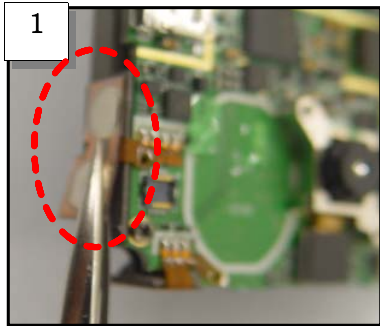


4. Disjoin the RECEIVER CONNECTOR.

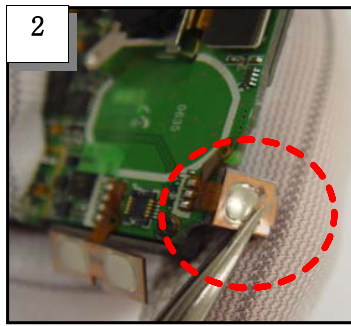


5. Unscrew four points of the JOG KEY

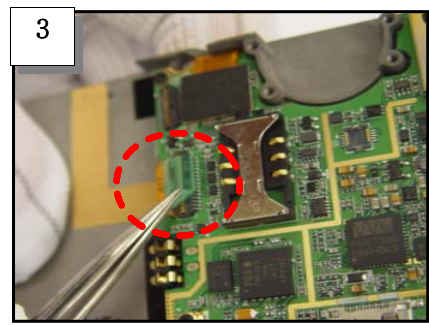
— Disassembly SET-PBA



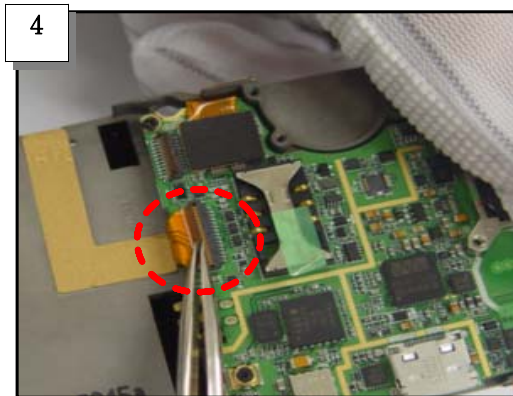
1. Detach the VOL KEY FPCB using the tweezers.



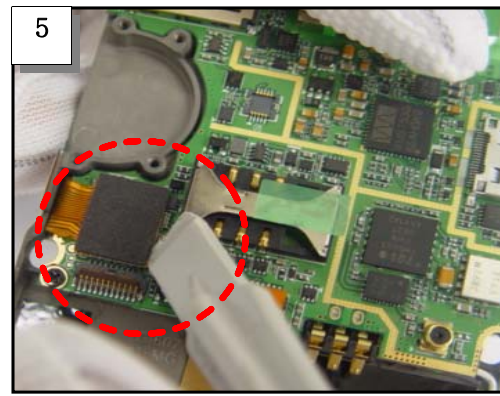
2. Detach the POWER KEY FPCB using the tweezers.



3. Detach the KEY FPCB CONNECTOR insulation tape using the tweezers.



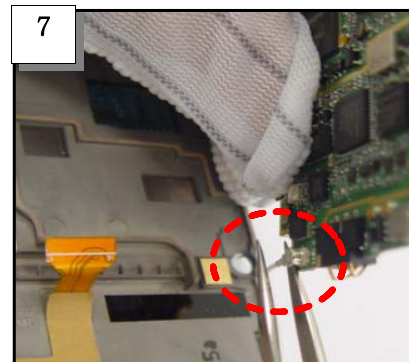
4. Disjoint the KEY FPCB CONNECTOR.



5. Disjoint the LCD CONNECTOR using the disassembly tool.

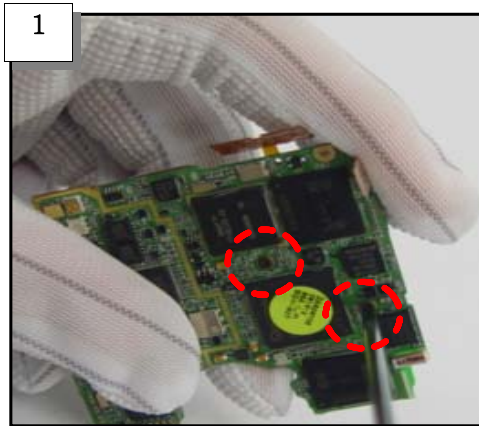


6. Unscrew two points in the PCB.

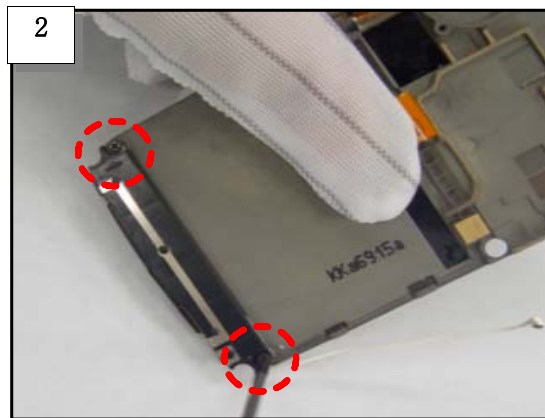


7. Detach the antenna wire from the PCB.

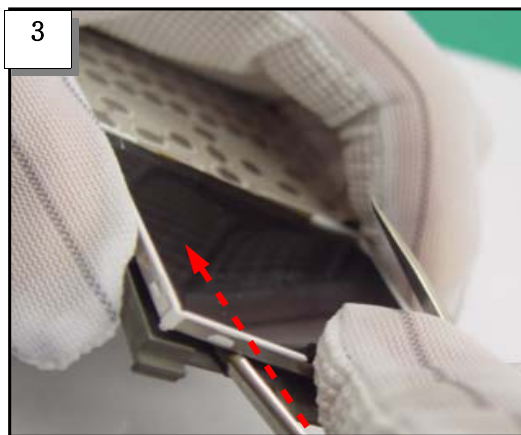
— Disassembly SET-Shield Case



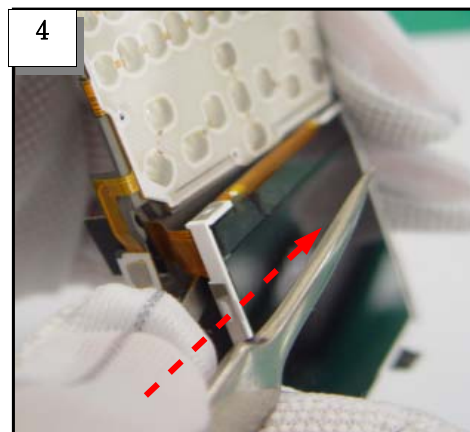
1. Unscrew camera bracket located on the PCB TOP side.



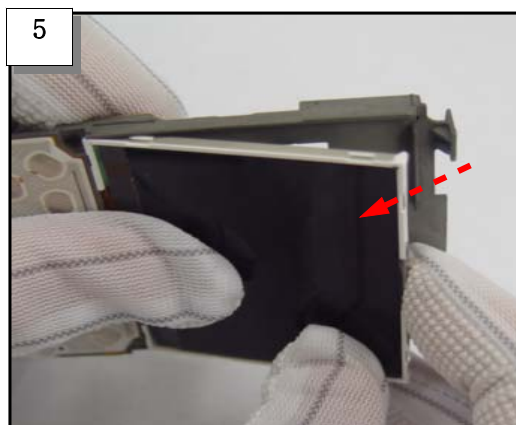
2. Unscrew two points in the antenna.



3. Insert tweezers into the backside of the LCD module and detach the double-stick tape as shown in the figure.

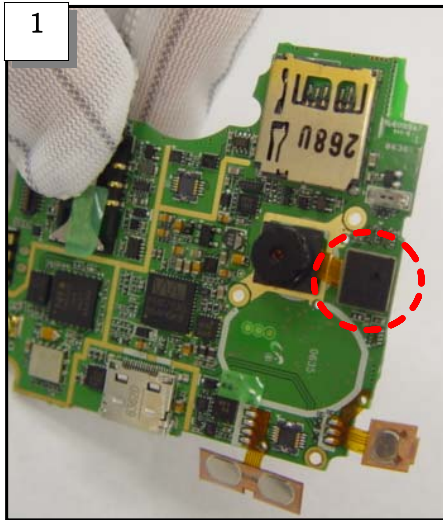


4. Insert tweezers into the backside of the LCD module and detach the double-stick tape as shown in the figure.

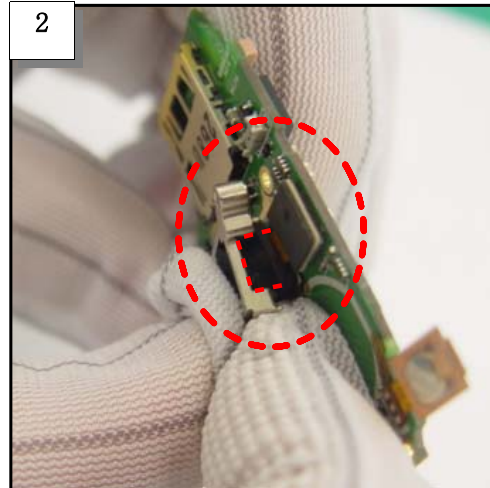


5. Disjoint LCD module as shown in the figure.

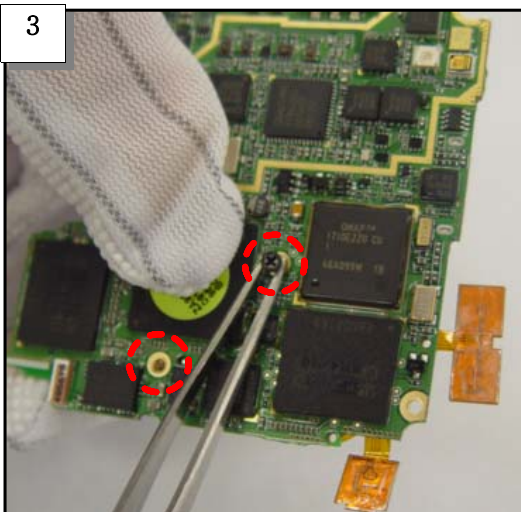
— Assembly SET-Camera



1. Connect the camera module to connector on the PCB.

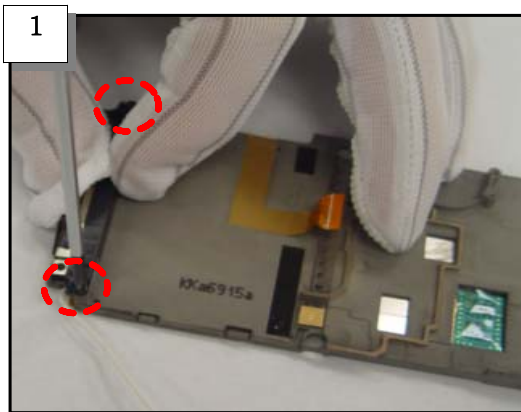


2. Assemble the camera bracket.
(Notice that groove of the camera bracket should be in the direction of the FPCB of the camera module.)

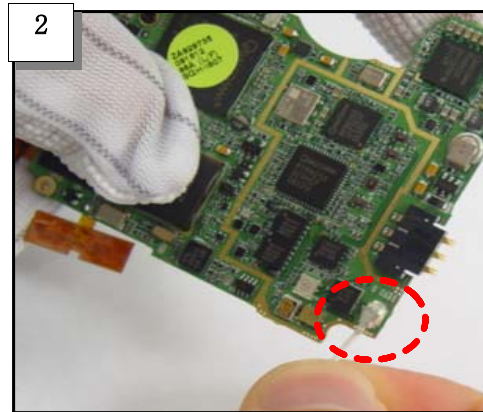


3. Screw the camera bracket to the TOP side of the PCB.

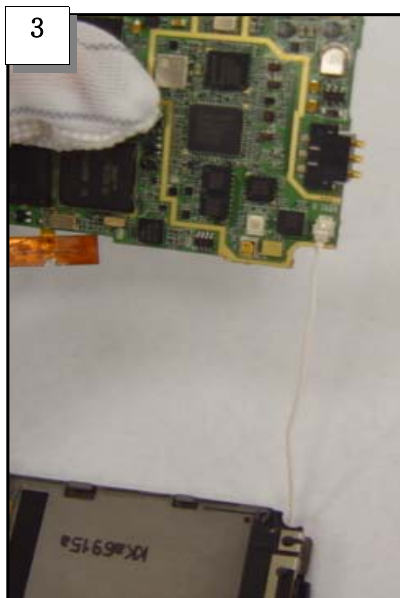
— Assembly SET-PBA



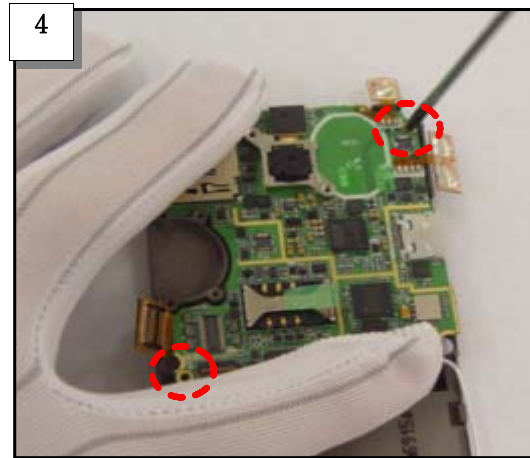
1. Screw antenna to the shield case.



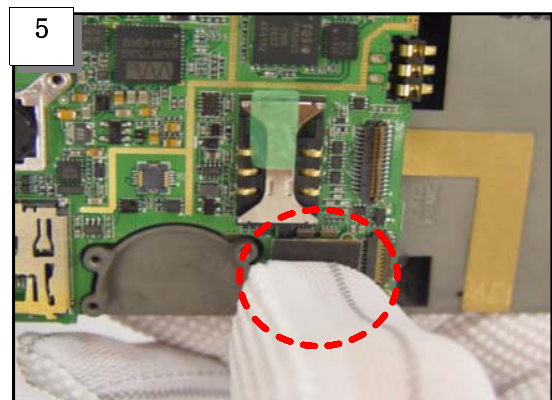
2. Attach the antenna wire to the PCB.



3. Check that the antenna wire should be connected as shown in the figure.

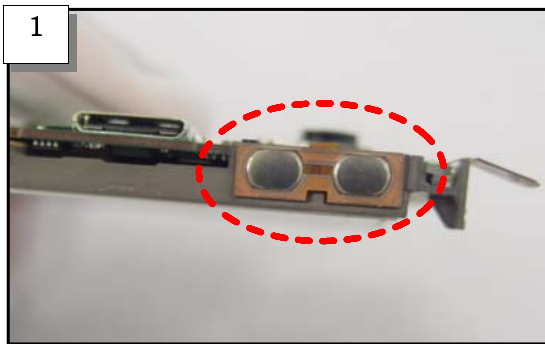


4. Screw the PBA to the shield case.

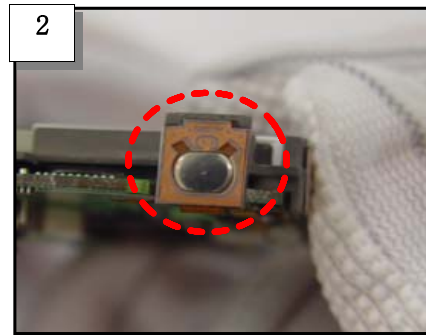


5. Connect LCD module to the connector on the PCB.

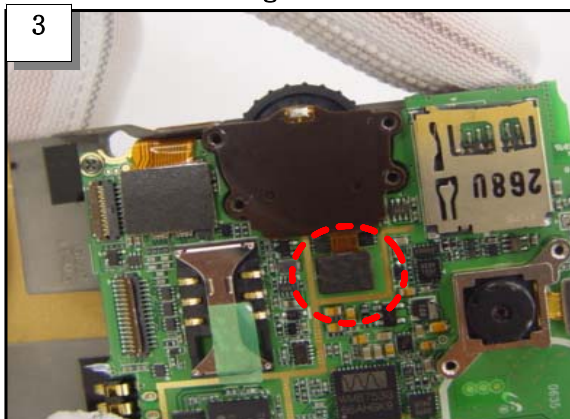
— Assembly SET-PBA



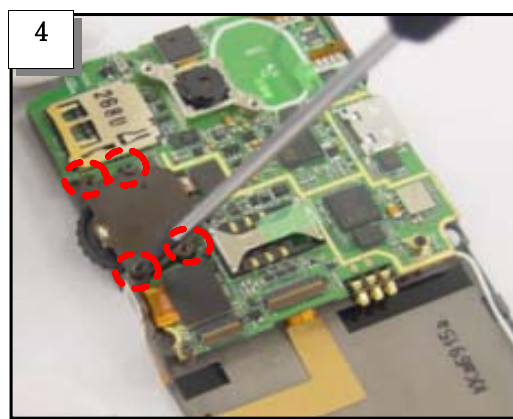
1. Attach the VOL KEY FPCB in accordance with the groove.



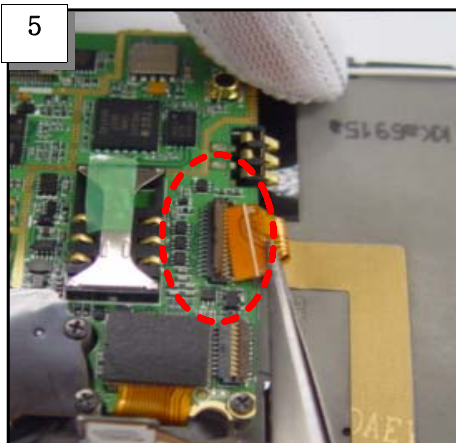
2. Attach the POWER KEY FPCB in accordance with the groove.



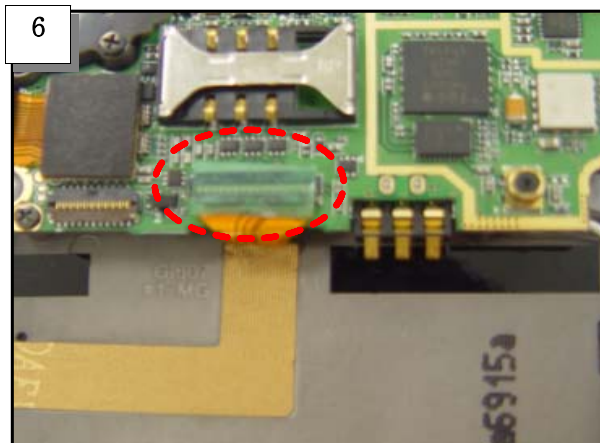
3. Connect the JOG KEY module to the connector on the PCB.



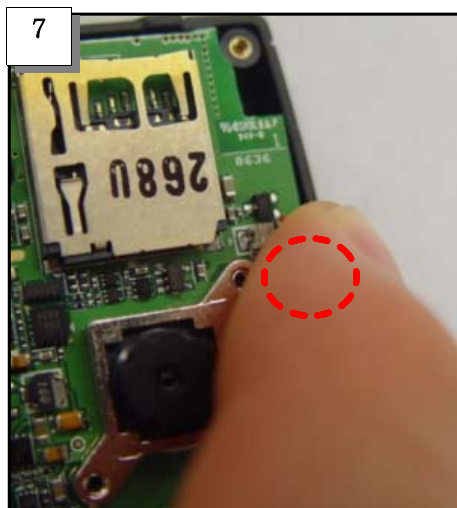
4. Screw JOG KEY module to the PCB .



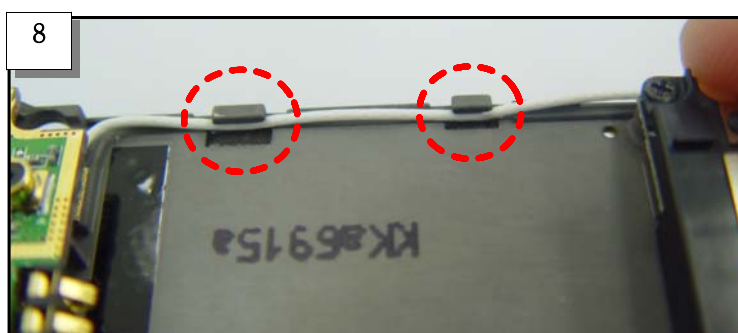
5. Insert the KEY FPCB to the CONNECTOR on the PCB.



6. Connect the KEY FPCB and attach the insulation tape on the connector.



7. Connect the RECEIVER module.



8. Check the antenna wire setting.



9. Connect the SPK-MOTOR module.
(Notice that the module should not be disconnected during the Rear assembly process.)



10. Screw the Rear case.

6. MAIN Electrical Parts List

Design LOC	Description	SEC Code	STATUS
ANT1	ANTENNA-CHIP	4202-001241	SA
C100	C-CER,CHIP	2203-000550	SA
C101	C-CER,CHIP	2203-000550	SA
C102	C-CER,CHIP	2203-006194	SA
C103	C-CER,CHIP	2203-006194	SA
C104	C-CER,CHIP	2203-006423	SA
C105	C-CER,CHIP	2203-006423	SA
C106	C-CER,CHIP	2203-006423	SA
C107	C-CER,CHIP	2203-006423	SA
C108	C-CER,CHIP	2203-006423	SA
C109	C-CER,CHIP	2203-006423	SA
C110	C-CER,CHIP	2203-006423	SA
C111	C-CER,CHIP	2203-006423	SA
C112	C-CER,CHIP	2203-006423	SA
C113	C-CER,CHIP	2203-006562	SA
C114	C-CER,CHIP	2203-006423	SA
C115	C-CER,CHIP	2203-006423	SA
C116	C-CER,CHIP	2203-005806	SNA
C117	C-CER,CHIP	2203-006423	SA
C118	C-CER,CHIP	2203-006423	SA
C119	C-CER,CHIP	2203-006562	SA
C120	C-CER,CHIP	2203-000425	SA
C121	C-CER,CHIP	2203-000425	SA
C122	C-CER,CHIP	2203-000550	SA
C123	C-CER,CHIP	2203-006423	SA
C124	C-CER,CHIP	2203-000278	SA
C125	C-CER,CHIP	2203-006194	SA
C126	C-CER,CHIP	2203-006423	SA
C127	C-CER,CHIP	2203-006562	SA
C128	C-CER,CHIP	2203-006423	SA
C129	C-CER,CHIP	2203-006423	SA
C130	C-CER,CHIP	2203-006423	SA
C131	C-CER,CHIP	2203-006423	SA
C132	C-CER,CHIP	2203-006423	SA
C133	C-CER,CHIP	2203-006462	SA
C201	C-CER,CHIP	2203-006194	SA
C202	C-CER,CHIP	2203-005683	SA
C203	C-CER,CHIP	2203-006824	SA
C204	C-CER,CHIP	2203-006824	SA
C205	C-CER,CHIP	2203-005683	SA
C206	C-CER,CHIP	2203-005683	SA
C207	C-CER,CHIP	2203-006838	SA
C209	C-CER,CHIP	2203-006423	SA
C210	C-CER,CHIP	2203-005683	SA
C211	C-CER,CHIP	2203-006423	SA
C212	C-CER,CHIP	2203-006324	SA
C214	C-CER,CHIP	2203-006838	SA
C215	C-CER,CHIP	2203-006838	SA
C216	C-CER,CHIP	2203-006423	SA
C217	C-CER,CHIP	2203-000330	SA
C219	C-CER,CHIP	2203-005683	SA
C220	C-CER,CHIP	2203-006423	SA
C222	C-CER,CHIP	2203-006423	SA

Design LOC	Description	SEC Code	STATUS
C225	C-CER,CHIP	2203-006423	SA
C226	C-CER,CHIP	2203-000330	SA
C227	C-CER,CHIP	2203-005683	SA
C228	C-CER,CHIP	2203-005683	SA
C229	C-CER,CHIP	2203-006562	SA
C230	C-CER,CHIP	2203-005683	SA
C232	C-CER,CHIP	2203-006423	SA
C233	C-CER,CHIP	2203-006868	SA
C234	C-CER,CHIP	2203-002687	SA
C235	C-CER,CHIP	2203-006868	SA
C236	C-CER,CHIP	2203-002687	SA
C237	C-CER,CHIP	2203-006423	SA
C238	C-CER,CHIP	2203-005682	SA
C239	C-CER,CHIP	2203-005682	SA
C243	C-CER,CHIP	2203-006194	SA
C244	C-CER,CHIP	2203-006838	SA
C251	C-CER,CHIP	2203-006423	SA
C253	C-CER,CHIP	2203-006423	SA
C302	C-CER,CHIP	2203-006562	SA
C303	C-CER,CHIP	2203-006423	SA
C308	C-CER,CHIP	2203-006423	SA
C309	C-CER,CHIP	2203-006838	SA
C310	C-CER,CHIP	2203-006423	SA
C311	C-CER,CHIP	2203-006838	SA
C312	C-CER,CHIP	2203-006194	SA
C314	C-CER,CHIP	2203-006562	SA
C315	C-CER,CHIP	2203-006423	SA
C316	C-CER,CHIP	2203-006048	SA
C317	C-CER,CHIP	2203-006048	SA
C319	C-CER,CHIP	2203-006562	SA
C321	C-CER,CHIP	2203-005682	SA
C323	C-CER,CHIP	2203-006423	SA
C324	C-CER,CHIP	2203-006562	SA
C325	C-CER,CHIP	2203-006562	SA
C326	C-CER,CHIP	2203-006423	SA
C327	C-CER,CHIP	2203-006562	SA
C331	C-CER,CHIP	2203-006562	SA
C332	C-CER,CHIP	2203-006562	SA
C333	C-CER,CHIP	2203-006423	SA
C400	C-CER,CHIP	2203-005138	SA
C401	C-CER,CHIP	2203-005138	SA
C402	C-CER,CHIP	2203-006824	SA
C403	C-CER,CHIP	2203-006562	SA
C405	C-CER,CHIP	2203-000425	SA
C406	C-CER,CHIP	2203-006423	SA
C407	BATTERY-LI(2ND)	4302-001181	SA
C408	C-CER,CHIP	2203-000233	SA
C409	C-CER,CHIP	2203-000425	SA
C410	C-CER,CHIP	2203-005736	SA
C411	C-CER,CHIP	2203-006423	SA
C413	C-CER,CHIP	2203-006824	SA
C414	C-CER,CHIP	2203-006824	SA
C415	C-CER,CHIP	2203-006324	SA

Design LOC	Description	SEC Code	STATUS
C416	C-CER,CHIP	2203-006324	SA
C417	C-CER,CHIP	2203-006824	SA
C418	C-CER,CHIP	2203-006824	SA
C419	C-CER,CHIP	2203-006324	SA
C420	C-CER,CHIP	2203-006324	SA
C421	C-CER,CHIP	2203-006324	SA
C422	C-CER,CHIP	2203-006324	SA
C423	C-CER,CHIP	2203-006562	SA
C424	C-CER,CHIP	2203-006562	SA
C425	C-CER,CHIP	2203-006838	SA
C426	C-CER,CHIP	2203-006824	SA
C427	C-CER,CHIP	2203-006824	SA
C428	C-CER,CHIP	2203-006838	SA
C430	C-CER,CHIP	2203-006423	SA
C433	C-CER,CHIP	2203-006423	SA
C440	C-CER,CHIP	2203-005682	SA
C441	C-CER,CHIP	2203-005682	SA
C442	C-CER,CHIP	2203-005682	SA
C443	C-CER,CHIP	2203-006838	SA
C444	C-TA,CHIP	2404-001268	SA
C450	C-CER,CHIP	2203-006824	SA
C451	C-CER,CHIP	2203-006824	SA
C452	C-CER,CHIP	2203-006824	SA
C454	C-CER,CHIP	2203-006824	SA
C455	C-CER,CHIP	2203-006824	SA
C456	C-CER,CHIP	2203-006824	SA
C457	C-CER,CHIP	2203-006824	SA
C458	C-CER,CHIP	2203-006824	SA
C465	C-CER,CHIP	2203-000627	SNA
C468	C-CER,CHIP	2203-006838	SA
C469	C-CER,CHIP	2203-006824	SA
C470	C-CER,CHIP	2203-006824	SA
C472	C-CER,CHIP	2203-000233	SA
C473	C-CER,CHIP	2203-001153	SA
C474	C-CER,CHIP	2203-006562	SA
C475	C-CER,CHIP	2203-006562	SA
C477	C-CER,CHIP	2203-006562	SA
C478	C-CER,CHIP	2203-006562	SA
C480	C-CER,CHIP	2203-006423	SA
C500	C-CER,CHIP	2203-006838	SA
C501	C-CER,CHIP	2203-006838	SA
C503	C-CER,CHIP	2203-006838	SA
C504	C-CER,CHIP	2203-006838	SA
C505	C-CER,CHIP	2203-006838	SA
C506	C-CER,CHIP	2203-006978	SA
C507	C-CER,CHIP	2203-006681	SA
C508	C-CER,CHIP	2203-006562	SA
C509	C-CER,CHIP	2203-003054	SA
C510	C-CER,CHIP	2203-000812	SA
C511	C-CER,CHIP	2203-003054	SA
C512	C-CER,CHIP	2203-000812	SA
C513	C-CER,CHIP	2203-000812	SA
C514	C-CER,CHIP	2203-003054	SA

Design LOC	Description	SEC Code	STATUS
C516	C-CER,CHIP	2203-005682	SA
C518	C-CER,CHIP	2203-005682	SA
C519	C-TA,CHIP	2404-001381	SA
C520	C-CER,CHIP	2203-005682	SA
C522	C-CER,CHIP	2203-006838	SA
C523	C-CER,CHIP	2203-006838	SA
C525	C-CER,CHIP	2203-005682	SA
C528	C-CER,CHIP	2203-006194	SA
C529	C-CER,CHIP	2203-006194	SA
C530	C-CER,CHIP	2203-005682	SA
C532	C-TA,CHIP	2404-001381	SA
C533	C-CER,CHIP	2203-006423	SA
C538	C-CER,CHIP	2203-006562	SA
C541	C-CER,CHIP	2203-006838	SA
C542	C-CER,CHIP	2203-006194	SA
C543	C-CER,CHIP	2203-006838	SA
C544	C-CER,CHIP	2203-005682	SA
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C546	C-CER,CHIP	2203-005682	SA
C547	C-CER,CHIP	2203-005682	SA
C548	C-CER,CHIP	2203-005682	SA
C600	C-CER,CHIP	2203-006668	SA
C601	C-CER,CHIP	2203-000627	SNA
C602	C-CER,CHIP	2203-000627	SNA
C603	C-CER,CHIP	2203-006462	SA
C604	C-CER,CHIP	2203-006194	SA
C605	C-CER,CHIP	2203-006423	SA
C606	C-CER,CHIP	2203-006423	SA
C608	C-CER,CHIP	2203-006423	SA
C609	C-CER,CHIP	2203-005682	SA
C610	C-CER,CHIP	2203-006194	SA
C611	C-CER,CHIP	2203-006423	SA
C612	C-CER,CHIP	2203-006562	SA
C615	C-CER,CHIP	2203-006824	SA
C617	C-CER,CHIP	2203-006194	SA
C618	C-CER,CHIP	2203-006838	SA
C619	C-CER,CHIP	2203-006423	SA
C622	C-CER,CHIP	2203-006194	SA
C623	C-CER,CHIP	2203-006423	SA
C624	C-CER,CHIP	2203-006423	SA
C625	C-CER,CHIP	2203-006617	SA
C626	C-CER,CHIP	2203-006423	SA
C629	C-CER,CHIP	2203-006194	SA
C630	C-CER,CHIP	2203-006838	SA
C632	C-CER,CHIP	2203-006423	SA
C633	C-CER,CHIP	2203-006194	SA
C636	C-CER,CHIP	2203-006423	SA
C637	C-CER,CHIP	2203-006423	SA
C638	C-CER,CHIP	2203-006617	SA
C639	C-CER,CHIP	2203-006562	SA
C640	C-CER,CHIP	2203-006562	SA
C641	C-CER,CHIP	2203-000254	SA
C642	C-CER,CHIP	2203-006562	SA

Design LOC	Description	SEC Code	STATUS
C643	C-CER,CHIP	2203-006048	SA
C644	C-CER,CHIP	2203-006423	SA
C645	C-CER,CHIP	2203-006423	SA
C646	C-CER,CHIP	2203-006562	SA
C647	C-CER,CHIP	2203-006194	SA
C648	C-CER,CHIP	2203-006423	SA
C649	C-CER,CHIP	2203-006194	SA
C650	C-CER,CHIP	2203-006423	SA
C651	C-CER,CHIP	2203-006562	SA
C652	C-CER,CHIP	2203-006562	SA
C653	C-CER,CHIP	2203-006048	SA
C654	C-CER,CHIP	2203-000254	SA
C655	C-CER,CHIP	2203-006194	SA
C656	C-CER,CHIP	2203-006423	SA
C657	C-CER,CHIP	2203-006194	SA
C658	C-CER,CHIP	2203-006423	SA
C659	C-CER,CHIP	2203-006194	SA
C660	C-CER,CHIP	2203-006423	SA
C662	C-CER,CHIP	2203-006194	SA
C663	C-CER,CHIP	2203-006423	SA
C668	C-CER,CHIP	2203-006423	SA
C669	C-CER,CHIP	2203-006194	SA
C670	C-CER,CHIP	2203-006423	SA
C671	C-CER,CHIP	2203-006562	SA
C672	C-CER,CHIP	2203-006556	SA
C673	C-CER,CHIP	2203-006423	SA
C700	C-CER,CHIP	2203-001239	SA
C701	C-CER,CHIP	2203-000812	SA
C702	C-CER,CHIP	2203-005719	SA
C703	C-CER,CHIP	2203-006194	SA
C705	C-CER,CHIP	2203-005682	SA
C706	C-CER,CHIP	2203-006194	SA
C707	C-CER,CHIP	2203-000233	SA
C708	C-CER,CHIP	2203-006423	SA
C709	C-CER,CHIP	2203-005682	SA
C710	C-CER,CHIP	2203-005682	SA
C711	C-CER,CHIP	2203-006423	SA
C712	C-CER,CHIP	2203-005719	SA
C713	C-CER,CHIP	2203-005682	SA
C714	C-CER,CHIP	2203-006423	SA
C715	C-CER,CHIP	2203-006379	SA
C716	C-CER,CHIP	2203-006423	SA
C717	C-CER,CHIP	2203-005682	SA
C718	C-CER,CHIP	2203-005719	SA
C719	C-CER,CHIP	2203-006556	SA
C720	C-CER,CHIP	2203-006423	SA
C721	C-CER,CHIP	2203-000438	SA
C722	C-CER,CHIP	2203-005682	SA
C723	C-CER,CHIP	2203-006194	SA
C724	C-CER,CHIP	2203-005736	SA
C725	C-CER,CHIP	2203-005719	SA
C726	C-CER,CHIP	2203-006556	SA
C727	C-CER,CHIP	2203-005682	SA

Design LOC	Description	SEC Code	STATUS
C728	C-CER,CHIP	2203-001259	SA
C729	C-CER,CHIP	2203-006194	SA
C730	C-CER,CHIP	2203-005682	SA
C731	C-CER,CHIP	2203-005777	SA
C732	C-CER,CHIP	2203-000725	SA
C733	C-CER,CHIP	2203-005682	SA
C734	C-CER,CHIP	2203-006423	SA
C735	C-CER,CHIP	2203-006847	SA
C738	C-CER,CHIP	2203-005682	SA
C739	C-CER,CHIP	2203-006423	SA
C740	C-CER,CHIP	2203-005682	SA
C741	C-CER,CHIP	2203-006423	SA
C742	C-CER,CHIP	2203-000438	SA
C743	C-CER,CHIP	2203-006556	SA
C744	C-CER,CHIP	2203-006348	SA
C745	C-CER,CHIP	2203-005682	SA
C746	C-CER,CHIP	2203-006824	SA
C747	C-CER,CHIP	2203-006423	SA
C748	C-CER,CHIP	2203-006194	SA
C749	C-CER,CHIP	2203-006194	SA
C750	C-CER,CHIP	2203-006642	SA
C751	C-CER,CHIP	2203-005736	SA
C752	C-CER,CHIP	2203-006868	SA
C753	C-TA,CHIP	2404-001406	SA
C754	C-CER,CHIP	2203-000995	SA
C755	C-CER,CHIP	2203-002709	SA
C756	C-CER,CHIP	2203-001153	SA
C759	C-CER,CHIP	2203-005729	SA
C761	C-CER,CHIP	2203-005729	SA
C800	C-CER,CHIP	2203-000233	SA
C801	C-CER,CHIP	2203-006423	SA
C802	C-CER,CHIP	2203-001239	SA
C803	C-TA,CHIP	2404-001339	SA
C804	C-CER,CHIP	2203-001239	SA
C805	C-CER,CHIP	2203-000438	SA
C806	C-CER,CHIP	2203-001239	SA
C807	C-CER,CHIP	2203-000233	SA
C810	C-CER,CHIP	2203-000233	SA
C811	C-CER,CHIP	2203-005736	SA
C812	C-CER,CHIP	2203-006423	SA
C813	C-CER,CHIP	2203-000233	SA
C814	C-CER,CHIP	2203-006194	SA
C815	C-CER,CHIP	2203-005736	SA
C816	C-CER,CHIP	2203-005727	SA
C817	C-CER,CHIP	2203-000233	SA
C818	C-CER,CHIP	2203-000233	SA
C820	C-CER,CHIP	2203-005727	SA
C821	C-CER,CHIP	2203-005736	SA
C822	C-CER,CHIP	2203-006423	SA
C823	C-CER,CHIP	2203-002668	SA
C824	C-CER,CHIP	2203-006423	SA
C825	C-CER,CHIP	2203-001178	SA
C826	C-CER,CHIP	2203-005727	SA

Design LOC	Description	SEC Code	STATUS
C827	C-CER,CHIP	2203-005736	SA
C830	C-CER,CHIP	2203-000330	SA
C831	C-CER,CHIP	2203-006423	SA
C832	C-CER,CHIP	2203-005736	SA
C833	C-TA,CHIP	2404-001339	SA
C834	C-CER,CHIP	2203-001178	SA
C835	C-CER,CHIP	2203-000940	SA
C837	C-CER,CHIP	2203-006423	SA
C838	C-CER,CHIP	2203-006846	SA
C840	C-CER,CHIP	2203-001178	SA
C841	C-CER,CHIP	2203-006846	SA
C843	C-CER,CHIP	2203-005736	SA
C844	C-CER,CHIP	2203-006423	SA
C845	C-CER,CHIP	2203-006423	SA
C846	C-CER,CHIP	2203-006846	SA
C847	C-CER,CHIP	2203-005736	SA
C848	C-CER,CHIP	2203-006423	SA
C849	C-CER,CHIP	2203-005717	SA
C850	C-CER,CHIP	2203-006824	SA
C851	C-CER,CHIP	2203-006423	SA
C852	C-CER,CHIP	2203-005736	SA
C853	C-CER,CHIP	2203-005727	SA
C854	C-CER,CHIP	2203-006423	SA
C855	C-CER,CHIP	2203-005736	SA
C856	C-CER,CHIP	2203-006194	SA
C857	C-CER,CHIP	2203-005717	SA
C858	C-CER,CHIP	2203-006194	SA
C859	C-CER,CHIP	2203-006423	SA
C860	C-CER,CHIP	2203-005806	SNA
C861	C-CER,CHIP	2203-005682	SA
C862	C-CER,CHIP	2203-006194	SA
C863	C-CER,CHIP	2203-000438	SA
C864	C-CER,CHIP	2203-006194	SA
C865	C-CER,CHIP	2203-006824	SA
C866	C-CER,CHIP	2203-006423	SA
C867	C-CER,CHIP	2203-006556	SA
C870	C-CER,CHIP	2203-005736	SA
C871	C-CER,CHIP	2203-006423	SA
C872	C-CER,CHIP	2203-000438	SA
C873	C-CER,CHIP	2203-005789	SA
C874	C-CER,CHIP	2203-005736	SA
CN100	CONNECTOR-CARD EDGE	3709-001448	SA
CN101	CONNECTOR-FPC/FFC/PIC	3708-002222	SA
CN201	SOCKET-BOARD TO BOARD	3710-002081	SA
CN401	CONNECTOR-CARD EDGE	3709-001421	SA
CN402	HEADER-BATTERY	3711-006217	SA
CN500	HEADER-BOARD TO BOARD	3711-005954	SA
CN501	HEADER-BOARD TO BOARD	3711-006119	SA
CN502	CONNECTOR-FPC/FFC/PIC	3708-002162	SA
CN503	HEADER-BOARD TO BOARD	3711-005550	SA
CN504	SOCKET-INTERFACE	3710-002442	SA
CN505	HEADER-BOARD TO BOARD	3711-005550	SA
CN700	CONNECTOR-COAXIAL	3705-001358	SA

Design LOC	Description	SEC Code	STATUS
CN701	CONNECTOR-COAXIAL	3705-001225	SA
D401	DIODE-ARRAY	0407-000115	SA
D402	DIODE-SWITCHING	0401-001144	SA
D403	DIODE-ZENER	0403-001547	SA
D500	DIODE-ZENER	0403-000772	SA
D501	DIODE-TVS	0406-001190	SA
D502	DIODE-TVS	0406-001167	SA
D503	DIODE-TVS	0406-001167	SA
D504	DIODE-TVS	0406-001190	SA
D505	DIODE-TVS	0406-001231	SA
D506	DIODE-TVS	0406-001231	SA
D507	DIODE-TVS	0406-001231	SA
D508	DIODE-TVS	0406-001231	SA
D509	DIODE-TVS	0406-001231	SA
D510	DIODE-ZENER	0403-001547	SA
D511	DIODE-ZENER	0403-001427	SA
D512	DIODE-TVS	0406-001167	SA
D515	DIODE-TVS	0406-001231	SA
D516	DIODE-TVS	0406-001231	SA
D517	DIODE-TVS	0406-001231	SA
D518	DIODE-TVS	0406-001231	SA
D519	DIODE-ARRAY	0407-000115	SA
D520	DIODE-TVS	0406-001231	SA
F300	FILTER-EMI SMD	2901-001283	SA
F500	FILTER-EMI SMD	2901-001286	SA
F501	FILTER-EMI SMD	2901-001286	SA
F502	FILTER-EMI/ESD	2901-001326	SA
F503	FILTER-EMI SMD	2901-001286	SA
F504	FILTER-EMI SMD	2901-001286	SA
F505	FILTER-EMI/ESD	2901-001326	SA
F506	FILTER-EMI SMD	2901-001286	SA
F508	FILTER-EMI/ESD	2901-001326	SA
F700	FILTER-SAW	2904-001628	SA
F701	FILTER-SAW	2904-001580	SA
F702	FILTER-SAW	2904-001716	SA
F800	FILTER-SAW	2904-001621	SA
F801	DUPLEXER-SAW	2910-000022	SA
F802	FILTER-SAW	2904-001625	SA
F804	DUPLEXER-FBAR	2910-000009	SA
F805	FILTER-SAW	2904-001667	SA
F806	FILTER-SAW	2904-001739	SA
L200	BEAD-SMD	3301-001438	SA
L201	BEAD-SMD	3301-001438	SA
L202	BEAD-SMD	3301-001438	SA
L203	BEAD-SMD	3301-001438	SA
L204	BEAD-SMD	3301-001851	SA
L205	BEAD-SMD	3301-001851	SA
L401	INDUCTOR-SMD	2703-002782	SA
L402	INDUCTOR-SMD	2703-002782	SA
L403	BEAD-SMD	3301-001208	SA
L404	INDUCTOR-SMD	2703-002768	SNA
L405	INDUCTOR-SMD	2703-002768	SNA
L406	BEAD-SMD	3301-001729	SA

Design LOC	Description	SEC Code	STATUS
L500	INDUCTOR-SMD	2703-002824	SA
L501	BEAD-SMD	3301-001729	SA
L502	BEAD-SMD	3301-001729	SA
L503	BEAD-SMD	3301-001729	SA
L700	INDUCTOR-SMD	2703-002842	SA
L701	INDUCTOR-SMD	2703-002901	SNA
L702	INDUCTOR-SMD	2703-002842	SA
L703	INDUCTOR-SMD	2703-001723	SA
L705	INDUCTOR-SMD	2703-002901	SNA
L706	INDUCTOR-SMD	2703-002870	SA
L707	INDUCTOR-SMD	2703-002918	SA
L708	INDUCTOR-SMD	2703-002953	SA
L709	INDUCTOR-SMD	2703-002918	SA
L710	INDUCTOR-SMD	2703-002901	SNA
L711	INDUCTOR-SMD	2703-002901	SNA
L712	INDUCTOR-SMD	2703-002793	SA
L713	INDUCTOR-SMD	2703-002819	SA
L714	INDUCTOR-SMD	2703-002953	SA
L715	INDUCTOR-SMD	2703-002793	SA
L717	BEAD-SMD	3301-001534	SA
L718	INDUCTOR-SMD	2703-002819	SA
L719	INDUCTOR-SMD	2703-002906	SA
L720	INDUCTOR-SMD	2703-002819	SA
L721	INDUCTOR-SMD	2703-002907	SNA
L722	INDUCTOR-SMD	2703-002906	SA
L723	INDUCTOR-SMD	2703-002901	SNA
L724	INDUCTOR-SMD	2703-002819	SA
L725	INDUCTOR-SMD	2703-002955	SA
L726	INDUCTOR-SMD	2703-002858	SA
L727	INDUCTOR-SMD	2703-002365	SA
L728	INDUCTOR-SMD	2703-002870	SA
L729	INDUCTOR-SMD	2703-002870	SA
L733	INDUCTOR-SMD	2703-002370	SA
L800	INDUCTOR-SMD	2703-002155	SA
L801	INDUCTOR-SMD	2703-002308	SA
L802	INDUCTOR-SMD	2703-002903	SA
L804	INDUCTOR-SMD	2703-002858	SA
L806	INDUCTOR-SMD	2703-002870	SA
L807	INDUCTOR-SMD	2703-002903	SA
L808	INDUCTOR-SMD	2703-002858	SA
L809	INDUCTOR-SMD	2703-002901	SNA
L810	INDUCTOR-SMD	2703-002919	SA
L811	INDUCTOR-SMD	2703-002917	SA
L813	BEAD-SMD	3301-001729	SA
L814	INDUCTOR-SMD	2703-002903	SA
L815	INDUCTOR-SMD	2703-002903	SA
L816	INDUCTOR-SMD	2703-002794	SA
L817	INDUCTOR-SMD	2703-002794	SA
L818	BEAD-SMD	3301-001729	SA
L819	BEAD-SMD	3301-001729	SA
L820	BEAD-SMD	3301-001729	SA
L821	INDUCTOR-SMD	2703-002906	SA
L822	INDUCTOR-SMD	2703-002795	SNA

Design LOC	Description	SEC Code	STATUS
MOD200	BLUETOOTH MODULE	4709-001413	SA
OSC100	CRYSTAL-SMD	2801-004318	SA
OSC101	CRYSTAL-SMD	2801-004466	SA
OSC400	CRYSTAL-SMD	2801-004466	SA
OSC600	RESONATOR-CERAMIC	2802-001182	SA
OSC700	OSCILLATOR-VCO	2806-001377	SA
OSC800	OSCILLATOR-VCTCXO	2809-001277	SA
OSC801	OSCILLATOR-VCO	2806-001372	SA
Q401	TR-DIGITAL	0504-001171	SA
Q402	TR-DIGITAL	0504-001171	SA
Q403	FET-SILICON	0505-001165	SA
Q404	TR-DIGITAL	0504-001171	SA
Q800	TR-DIGITAL	0504-001151	SA
Q801	TR-DIGITAL	0504-001151	SA
Q805	TR-DIGITAL	0504-001151	SA
R100	R-CHIP	2007-008478	SA
R101	R-CHIP	2007-008478	SA
R102	R-CHIP	2007-008516	SA
R103	R-CHIP	2007-008531	SA
R104	R-CHIP	2007-000167	SA
R108	R-CHIP	2007-008516	SA
R111	R-CHIP	2007-008055	SA
R118	R-CHIP	2007-008516	SA
R119	R-CHIP	2007-008419	SA
R125	R-CHIP	2007-008055	SA
R130	R-CHIP	2007-008055	SA
R134	R-CHIP	2007-008516	SA
R135	R-CHIP	2007-008055	SA
R139	R-CHIP	2007-008055	SA
R140	R-CHIP	2007-008542	SA
R141	R-CHIP	2007-008055	SA
R143	R-CHIP	2007-008542	SA
R146	R-CHIP	2007-008542	SA
R200	R-CHIP	2007-000171	SA
R201	R-CHIP	2007-008544	SA
R202	R-CHIP	2007-008478	SA
R203	R-CHIP	2007-008516	SA
R204	R-CHIP	2007-008542	SA
R205	R-CHIP	2007-008542	SA
R206	R-CHIP	2007-008542	SA
R207	R-CHIP	2007-008478	SA
R208	R-CHIP	2007-008544	SA
R210	R-CHIP	2007-008544	SA
R211	R-CHIP	2007-008478	SA
R212	R-CHIP	2007-008483	SA
R213	R-CHIP	2007-008478	SA
R214	R-CHIP	2007-008544	SA
R215	R-CHIP	2007-008275	SA
R217	R-CHIP	2007-008275	SA
R218	R-CHIP	2007-008486	SA
R230	R-CHIP	2007-008052	SA
R240	R-CHIP	2007-008052	SA
R241	R-CHIP	2007-008052	SA

Design LOC	Description	SEC Code	STATUS
R242	R-CHIP	2007-008052	SA
R300	R-CHIP	2007-008055	SA
R301	R-CHIP	2007-008055	SA
R302	R-CHIP	2007-008055	SA
R303	R-CHIP	2007-008055	SA
R304	R-CHIP	2007-008516	SA
R305	R-CHIP	2007-008055	SA
R307	R-CHIP	2007-008478	SA
R309	R-CHIP	2007-009115	SA
R310	R-CHIP	2007-009115	SA
R311	R-CHIP	2007-008055	SA
R312	R-CHIP	2007-007314	SA
R313	R-CHIP	2007-007135	SA
R314	R-CHIP	2007-007489	SA
R315	R-CHIP	2007-007334	SA
R316	R-CHIP	2007-000154	SA
R317	R-CHIP	2007-000156	SA
R318	R-CHIP	2007-009155	SNA
R319	R-CHIP	2007-008483	SA
R320	R-CHIP	2007-009155	SNA
R400	R-CHIP	2007-007199	SA
R401	R-CHIP	2007-007142	SA
R402	R-CHIP	2007-007199	SA
R403	R-CHIP	2007-000157	SA
R404	R-CHIP	2007-008542	SA
R405	R-CHIP	2007-008055	SA
R406	R-CHIP	2007-008055	SA
R408	R-CHIP	2007-001298	SA
R409	R-CHIP	2007-007468	SA
R410	R-CHIP	2007-008542	SA
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R412	R-CHIP	2007-008542	SA
R413	R-CHIP	2007-008542	SA
R414	R-CHIP	2007-007148	SA
R415	R-CHIP	2007-001320	SA
R416	R-CHIP	2007-001119	SA
R418	R-CHIP	2007-008055	SA
R424	R-CHIP	2007-000151	SA
R430	R-CHIP	2007-007741	SA
R431	R-CHIP	2007-008483	SA
R432	R-CHIP	2007-000170	SA
R433	R-CHIP	2007-008483	SA
R435	R-CHIP	2007-008135	SA
R436	R-CHIP	2007-007334	SA
R438	R-CHIP	2007-008055	SA
R439	R-CHIP	2007-008055	SA
R440	R-CHIP	2007-000148	SA
R442	R-CHIP	2007-008542	SA
R444	R-CHIP	2007-001323	SA
R445	R-CHIP	2007-008055	SA
R446	R-CHIP	2007-009155	SNA
R447	R-CHIP	2007-009155	SNA
R501	R-CHIP	2007-008531	SA

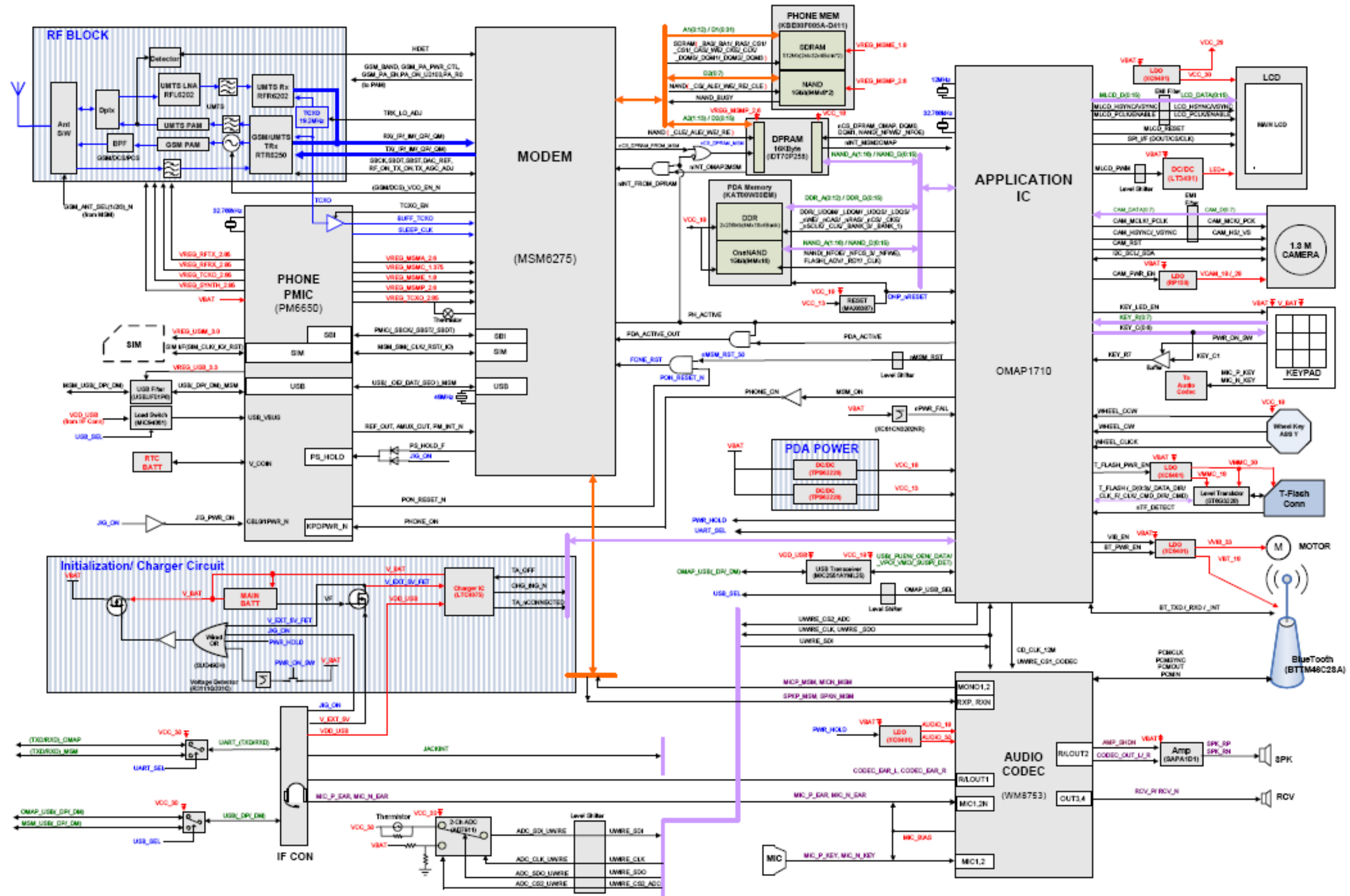
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R502	R-CHIP	2007-008055	SA
R503	DIODE-TVS	0406-001167	SA
R507	R-CHIP	2007-007741	SA
R508	R-CHIP	2007-007741	SA
R509	R-CHIP	2007-008055	SA
R510	R-CHIP	2007-009170	SA
R514	R-CHIP	2007-007741	SA
R515	R-CHIP	2007-008419	SA
R516	R-CHIP	2007-008419	SA
R517	R-CHIP	2007-008419	SA
R520	R-CHIP	2007-000166	SA
R523	R-CHIP	2007-008516	SA
R600	R-CHIP	2007-008516	SA
R601	R-CHIP	2007-008516	SA
R602	R-CHIP	2007-008516	SA
R603	R-CHIP	2007-008516	SA
R604	R-CHIP	2007-008049	SA
R605	R-CHIP	2007-008516	SA
R606	R-CHIP	2007-008419	SA
R607	R-CHIP	2007-008516	SA
R608	R-CHIP	2007-008516	SA
R610	R-CHIP	2007-009170	SA
R611	R-CHIP	2007-007314	SA
R612	R-CHIP	2007-007135	SA
R613	R-CHIP	2007-009170	SA
R614	R-CHIP	2007-007741	SA
R615	R-CHIP	2007-007741	SA
R616	R-CHIP	2007-009170	SA
R619	R-CHIP	2007-007107	SA
R623	R-CHIP	2007-000156	SA
R625	R-CHIP	2007-000636	SA
R626	R-CHIP	2007-008542	SA
R628	R-CHIP	2007-007316	SA
R629	R-CHIP	2007-008806	SA
R700	R-CHIP	2007-007491	SA
R701	R-CHIP	2007-008806	SA
R703	R-CHIP	2007-008045	SA
R704	R-CHIP	2007-008419	SA
R705	R-CHIP	2007-008419	SA
R706	R-CHIP	2007-008051	SA
R707	R-CHIP	2007-008419	SA
R708	R-CHIP	2007-008531	SA
R709	R-CHIP	2007-008419	SA
R710	R-CHIP	2007-000145	SA
R711	R-CHIP	2007-008531	SA
R712	R-CHIP	2007-008542	SA
R713	R-CHIP	2007-008542	SA
R714	R-CHIP	2007-008542	SA
R715	R-CHIP	2007-008785	SNA
R716	R-CHIP	2007-008045	SA
R717	R-CHIP	2007-008785	SNA
R718	R-CHIP	2007-008420	SA
R719	R-CHIP	2007-008581	SNA

Design LOC	Description	SEC Code	STATUS
R720	R-CHIP	2007-008581	SNA
R723	R-CHIP	2007-008579	SA
R724	R-CHIP	2007-008579	SA
R725	R-CHIP	2007-008588	SA
R726	R-CHIP	2007-008045	SA
R727	R-CHIP	2007-008045	SA
R800	R-CHIP	2007-009111	SA
R801	R-CHIP	2007-008053	SA
R802	R-CHIP	2007-009111	SA
R803	R-CHIP	2007-009212	SA
R804	R-CHIP	2007-009212	SA
R805	R-CHIP	2007-008045	SA
R806	R-CHIP	2007-008043	SA
R807	R-CHIP	2007-008053	SA
R808	R-CHIP	2007-007491	SA
R809	R-CHIP	2007-008053	SA
R810	R-CHIP	2007-008806	SA
R811	R-CHIP	2007-008045	SA
R813	R-CHIP	2007-008045	SA
R815	R-CHIP	2007-008419	SA
R816	R-CHIP	2007-008420	SA
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R818	R-CHIP	2007-008051	SA
R820	R-CHIP	2007-008548	SA
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TA202	C-TA,CHIP	2404-001402	SA
TA203	C-TA,CHIP	2404-001402	SA
TA205	C-TA,CHIP	2404-001381	SA
TA206	C-TA,CHIP	2404-001402	SA
TA207	C-TA,CHIP	2404-001381	SA
TA208	C-TA,CHIP	2404-001402	SA
TA301	C-TA,CHIP	2404-001381	SA
TA401	C-TA,CHIP	2404-001474	SA
TA402	C-TA,CHIP	2404-001474	SA
TA404	C-TA,CHIP	2404-001281	SA
TA405	C-TA,CHIP	2404-001396	SA
TA406	C-TA,CHIP	2404-001396	SA
TA407	C-CER,CHIP	2203-006361	SA
TA408	C-CER,CHIP	2203-006361	SA
TA409	C-TA,CHIP	2404-001281	SA
U100	IC-DSP	0904-002074	SA
U101	IC-LEVEL DRIVER	1003-001984	SA
U102	IC-VOL. DETECTOR	1203-003924	SA
U103	IC-VOL. DETECTOR	1203-004469	SA
U104	IC-CMOS LOGIC	0801-002321	SA
U200	IC-CODEC	1205-003114	SA
U201	IC-AUDIO AMP	1201-002240	SA
U202	IC-ANALOG SWITCH	1001-001394	SA
U203	FREQ-ISOLATOR	4709-001396	SA
U205	FREQ-ISOLATOR	4709-001397	SA
U300	IC-SRAM	1106-001511	SA
U301	IC-MCP	1108-000043	SA
U302	IC-CMOS LOGIC	0801-003022	SA

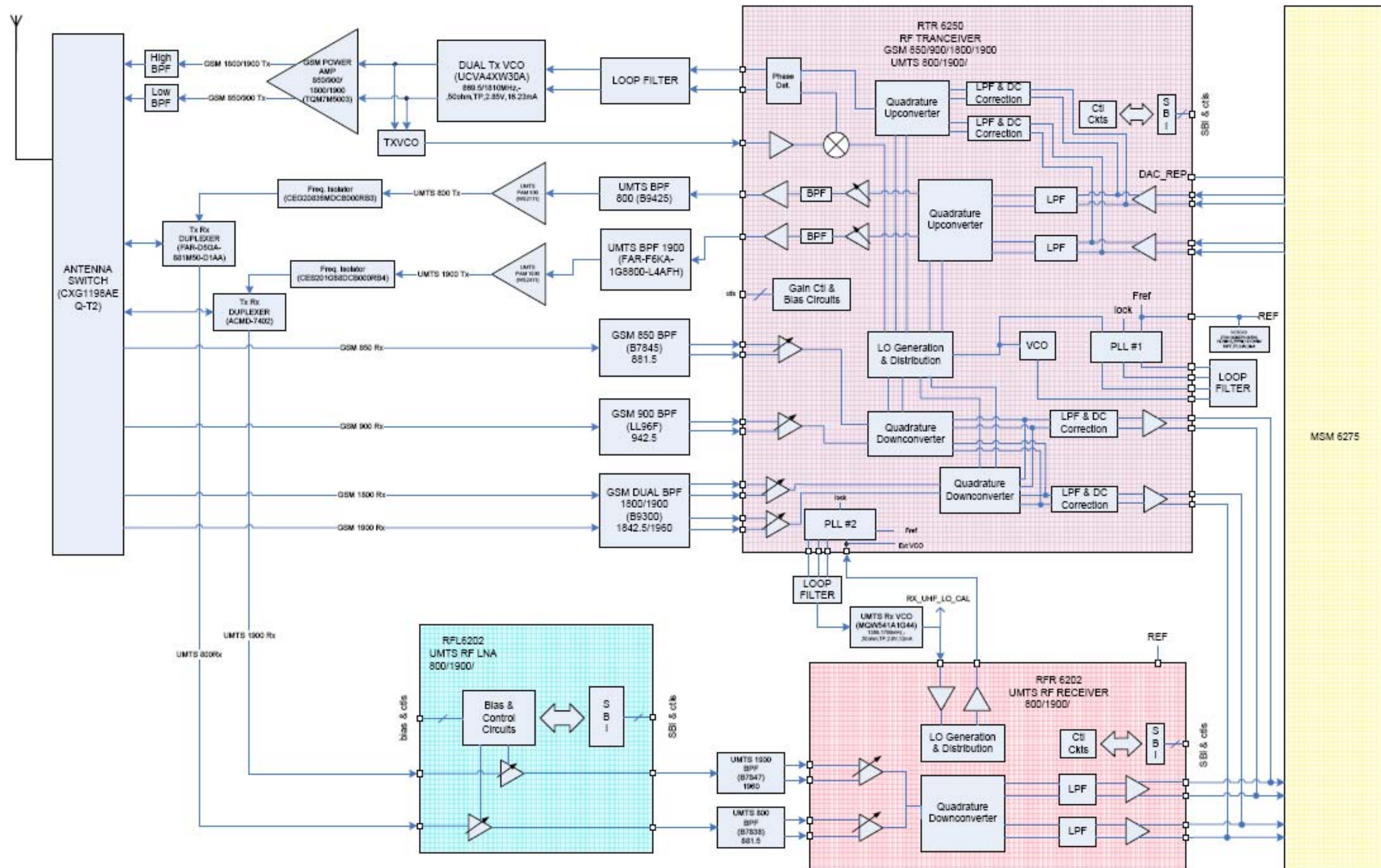
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U303	IC-CMOS LOGIC	0801-002970	SA
U304	IC-CMOS LOGIC	0801-002529	SA
U305	IC-TRANSCEIVER	1205-003115	SA
U307	IC-ANALOG SWITCH	1001-001221	SA
U308	IC-D/A CONVERTER	1002-001488	SA
U309	IC-SWITCH	1205-002784	SA
U310	IC-ANALOG SWITCH	1001-001359	SA
U311	IC-CMOS LOGIC	0801-002970	SA
U400	IC-POWER SUPERVISOR	1203-004102	SA
U401	IC-BATTERY	1203-003823	SA
U405	IC-MULTI REG.	1203-004340	SA
U406	IC-MULTI REG.	1203-004361	SA
U408	IC-MULTI REG.	1203-004120	SA
U409	IC-MULTI REG.	1203-004447	SA
U410	IC-DC/DC CONVERTER	1203-003538	SA
U412	IC-DC/DC CONVERTER	1203-003919	SA
U413	IC-MULTI REG.	1203-004120	SA
U415	IC-VOL. DETECTOR	1203-002716	SA
U416	IC-POS.FIXED REG.	1203-003737	SA
U417	IC-SWITCH	1205-002874	SNA
U500	IC-DC/DC CONVERTER	1203-004172	SA
U501	IC-CMOS LOGIC	0801-003136	SA
U600	IC-MODEM	1205-002790	SA
U601	IC-MCP	1108-000041	SA
U602	IC-CMOS LOGIC	0801-003016	SA
U700	IC-TRANSCEIVER	1205-002645	SA
U701	IC-SWITCH	1205-002783	SA
U702	IC-POWER AMP	1201-002288	SA
U800	IC-POWER AMP	1201-002450	SA
U801	IC-DETECTOR	1209-001577	SA
U802	IC-RF AMP	1201-002297	SA
U803	IC-POWER AMP	1201-002452	SA
U804	IC-RECEIVER	1205-002798	SA
V300	THERMISTOR-NTC	1404-001224	SA
V600	THERMISTOR-NTC	1404-001224	SA
ZD101	DIODE-TVS	0406-001210	SA
ZD201	DIODE-TVS	0406-001231	SA
ZD202	DIODE-TVS	0406-001231	SA
ZD501	DIODE-ZENER	0403-001339	SA
ZD502	DIODE-TVS	0406-001190	SA

7. Block Diagrams

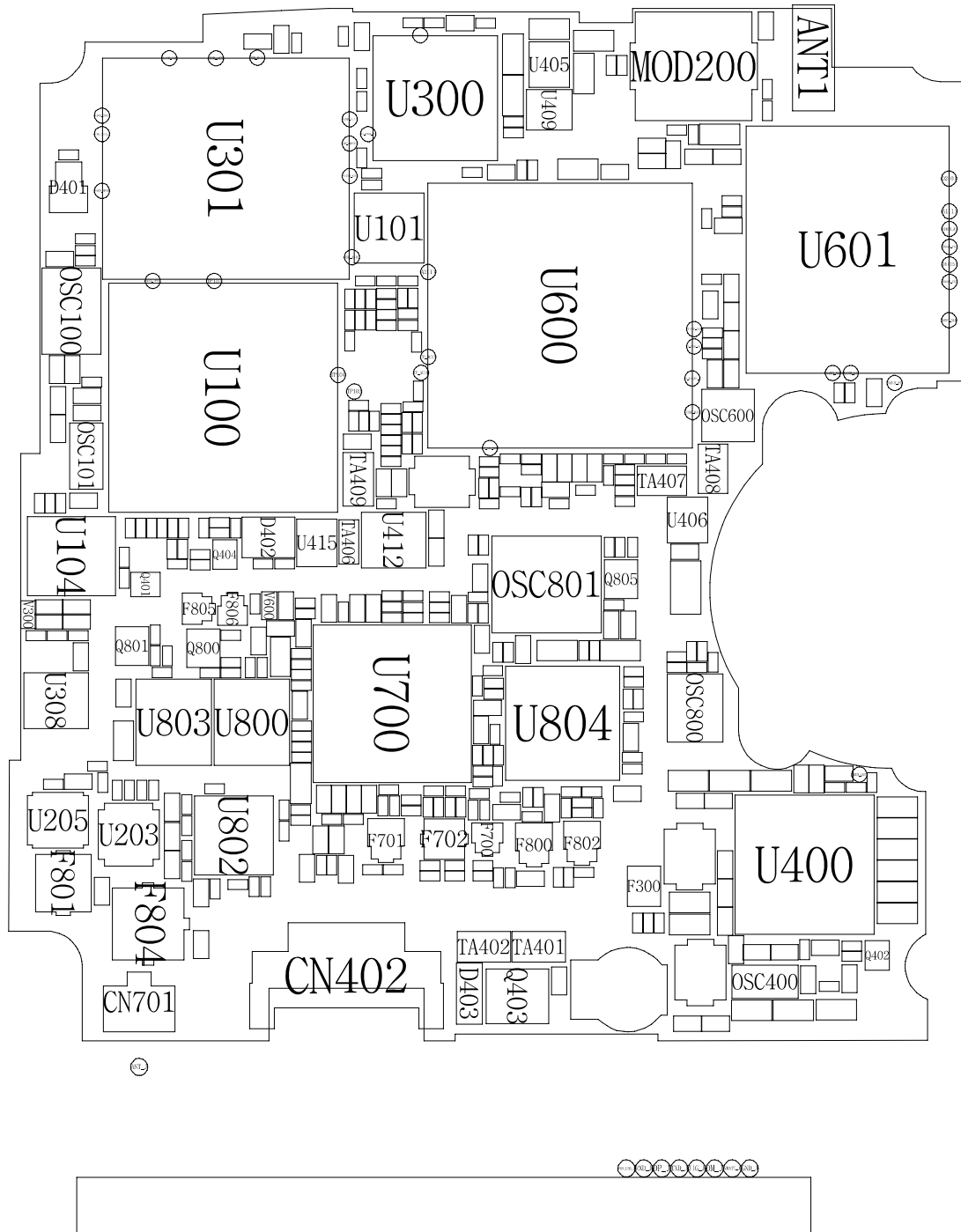
7-1. Base Band Block Diagram

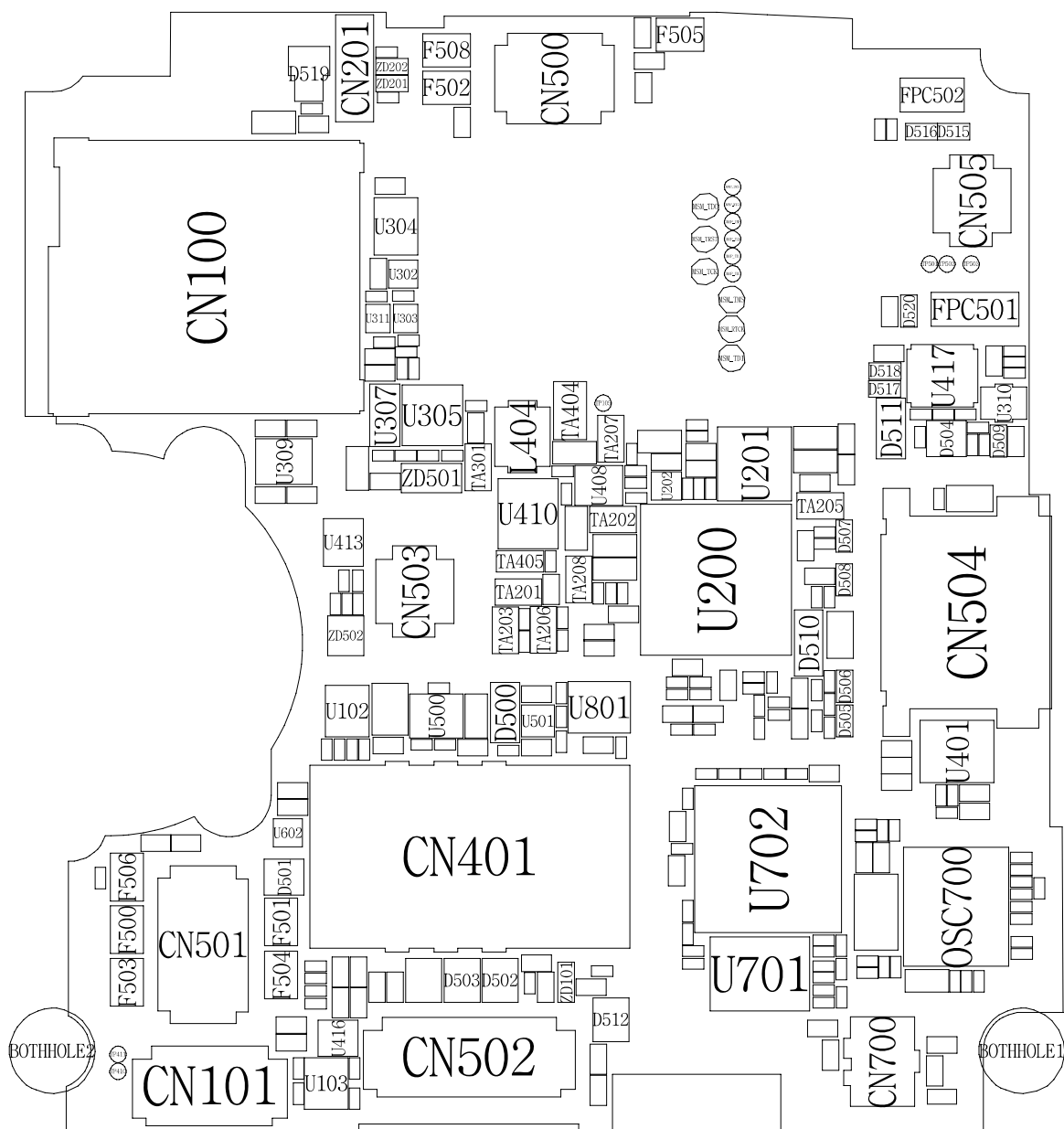


7-2. RF Block Diagram



Top

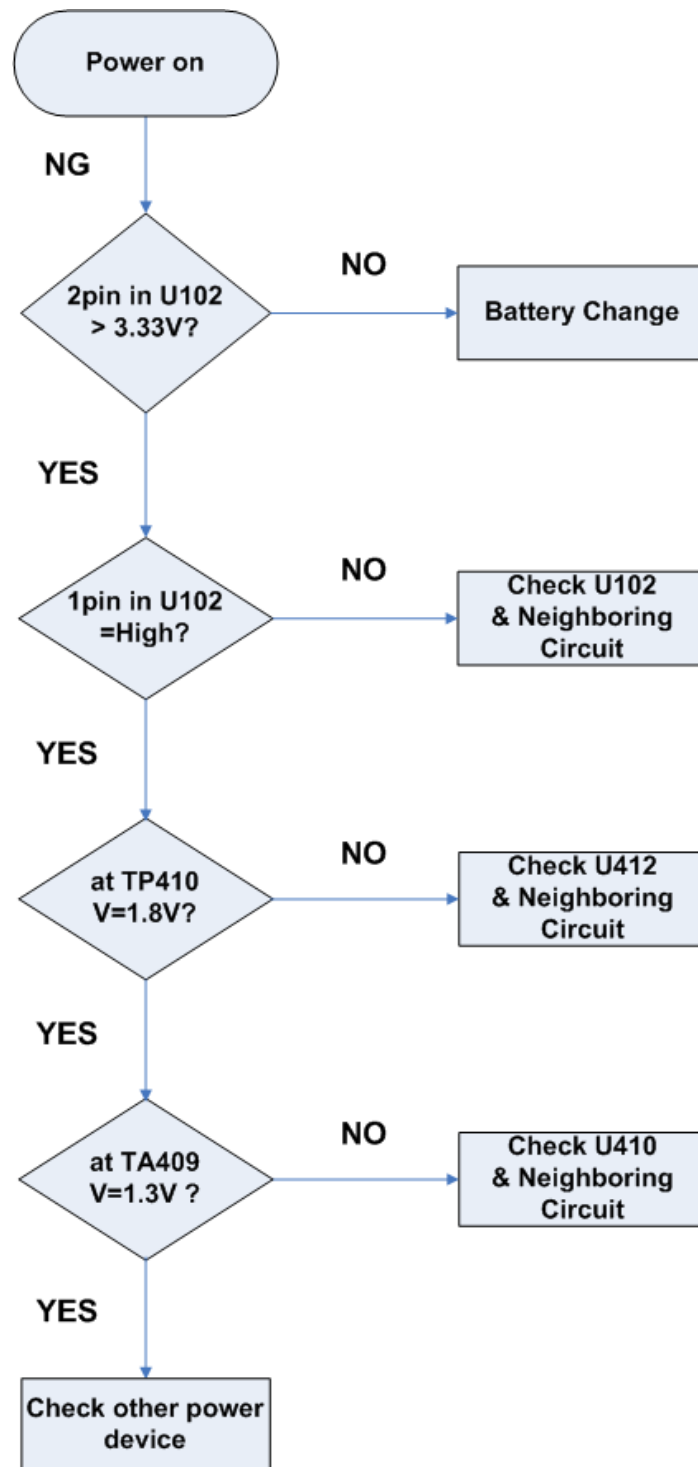


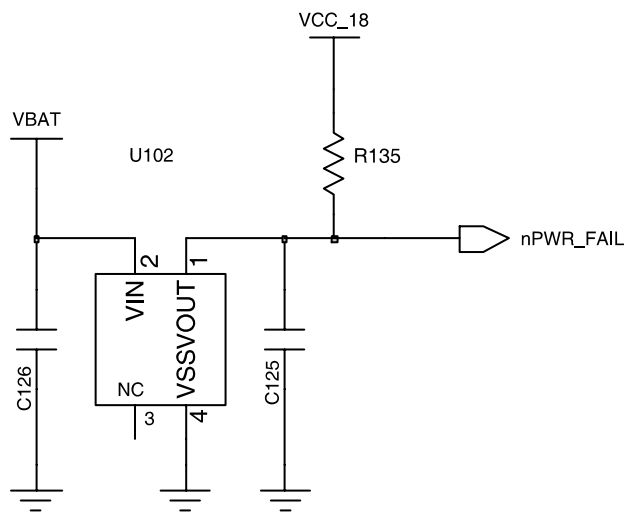


9. Flow Chart of TroubleShooting

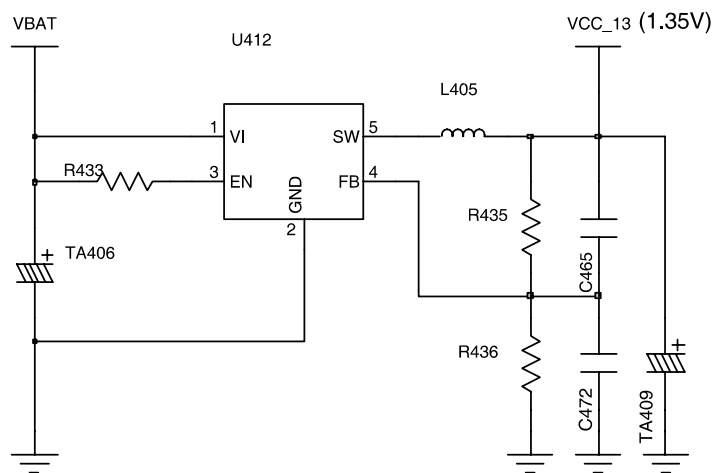
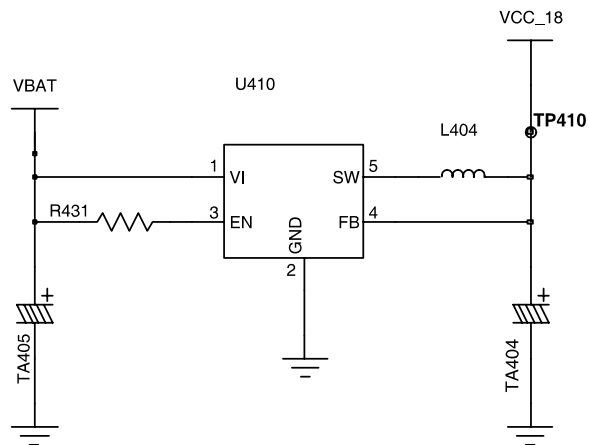
9-1. Power On

- PDA Part

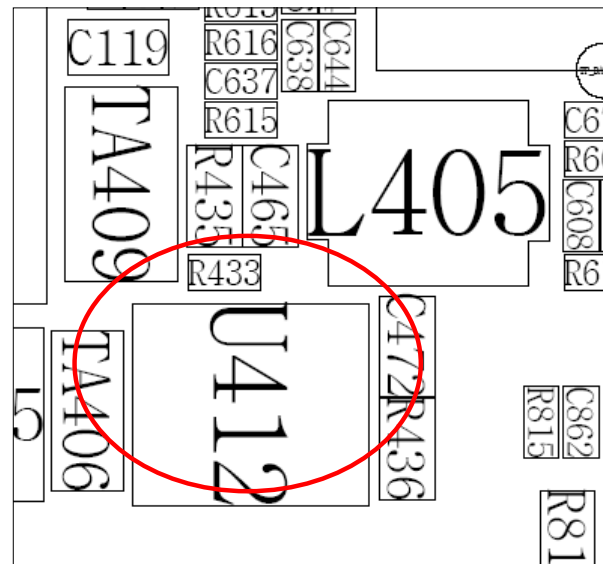
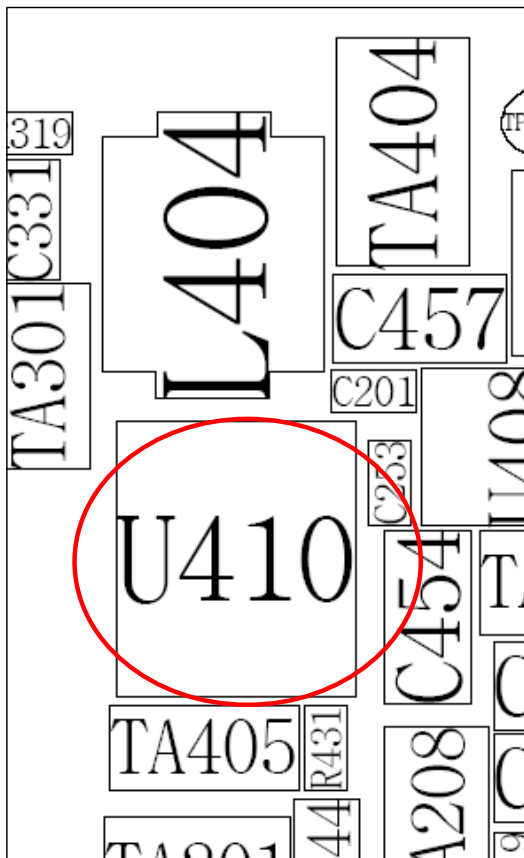
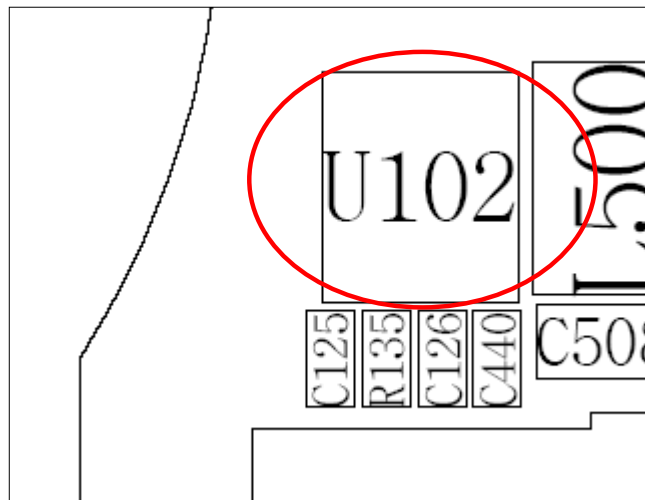




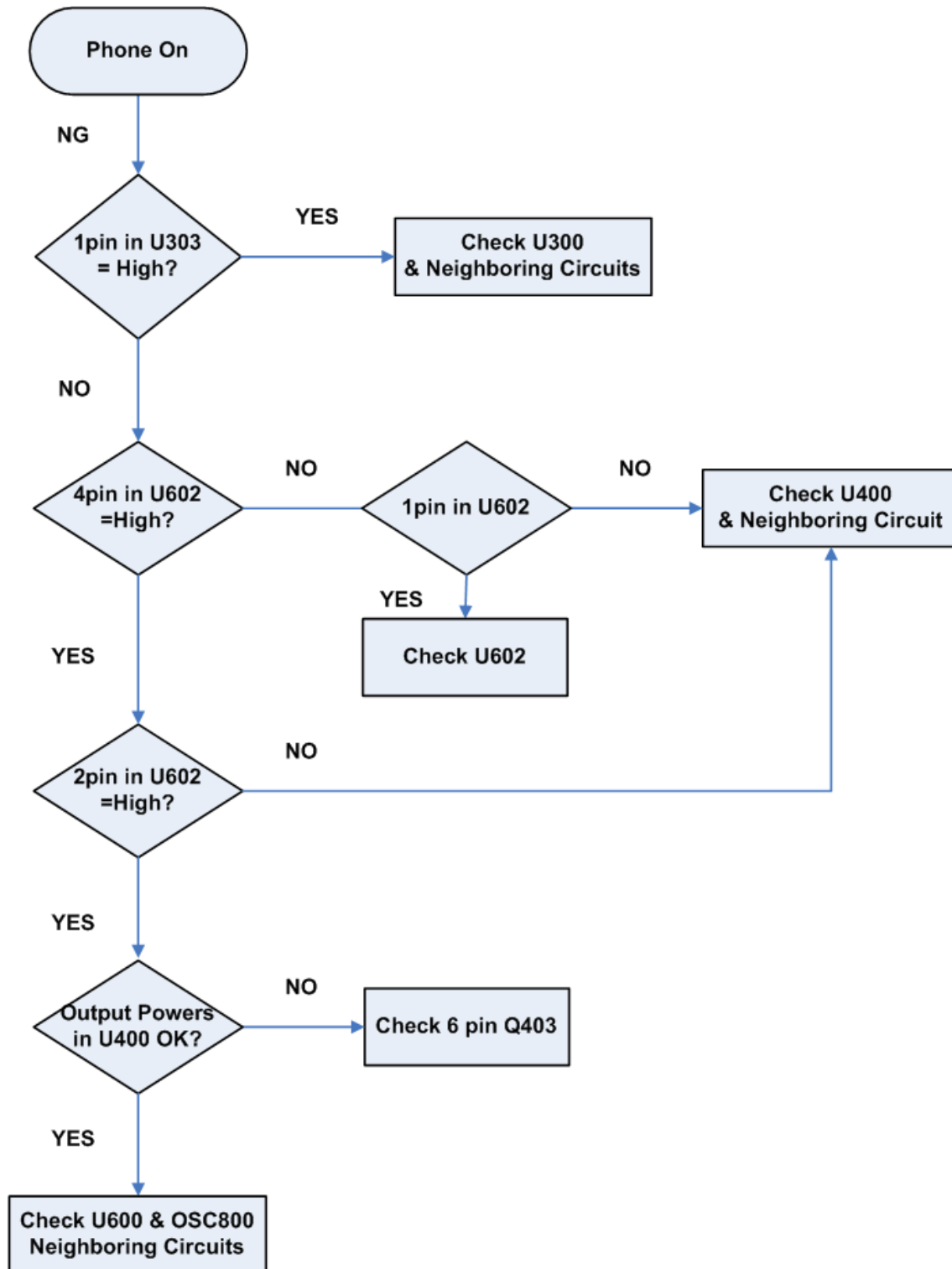
U102 & neighboring circuits

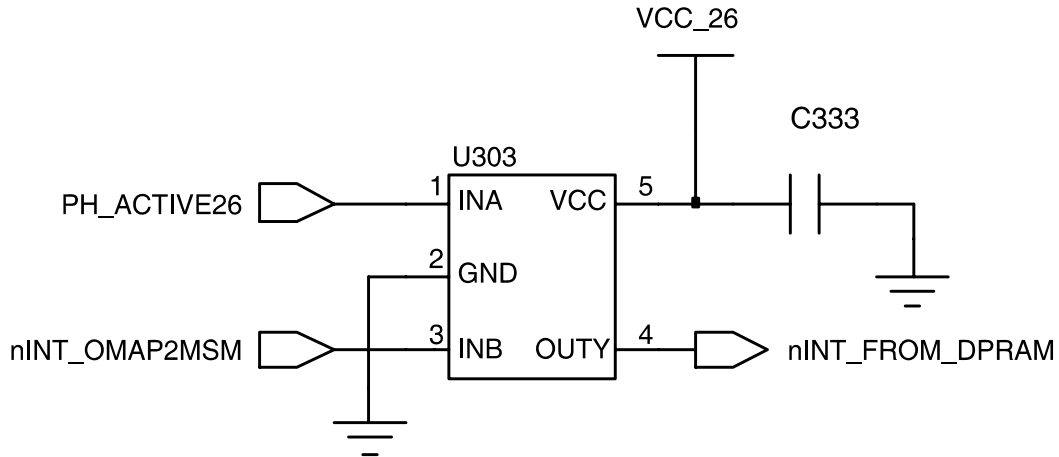


U410 and U412 & neighboring circuits

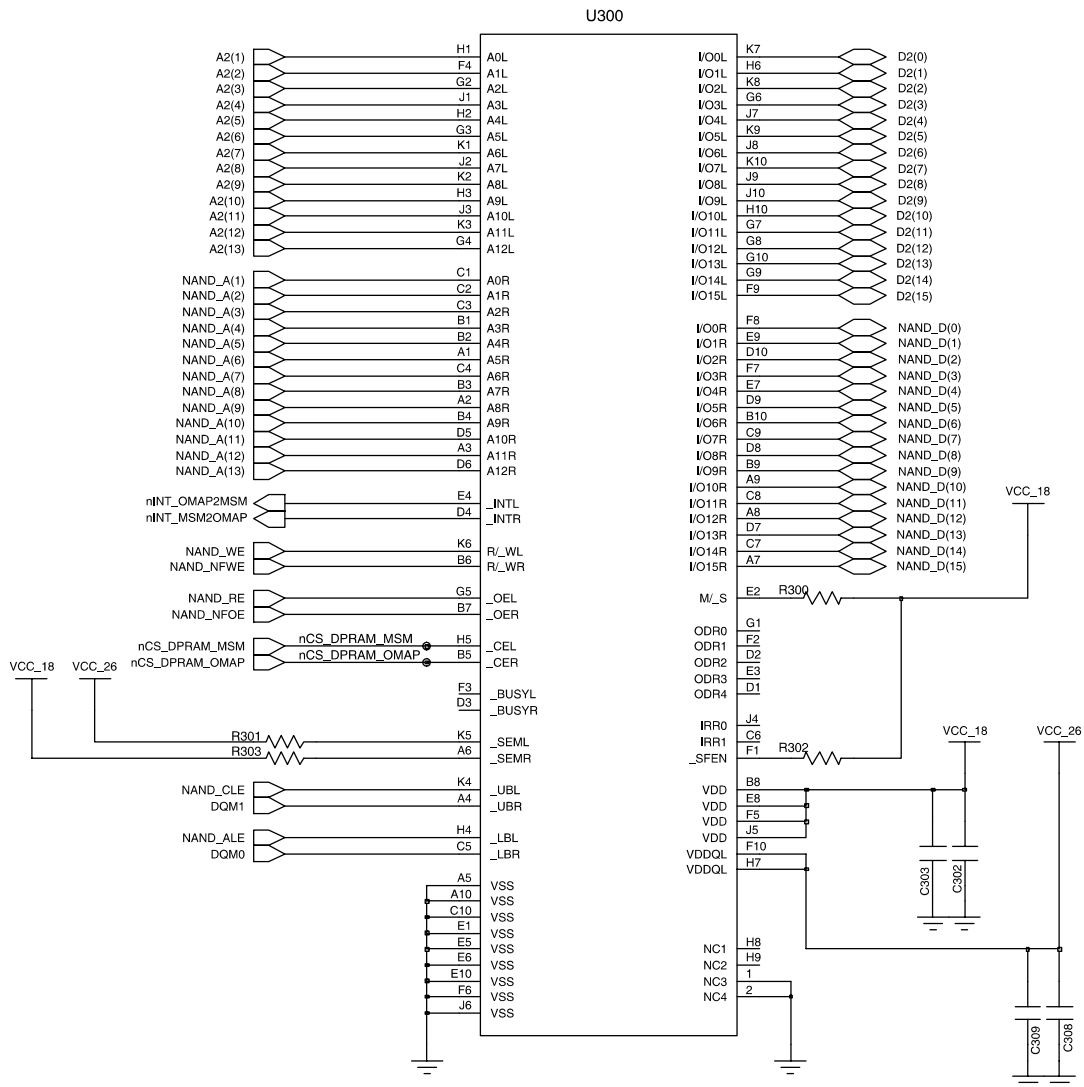


● PHONE Part



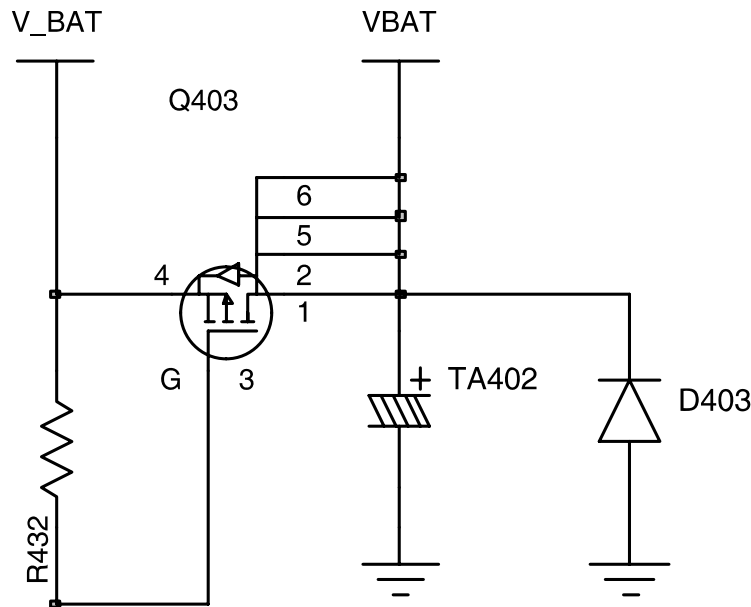


U303 & neighboring circuits

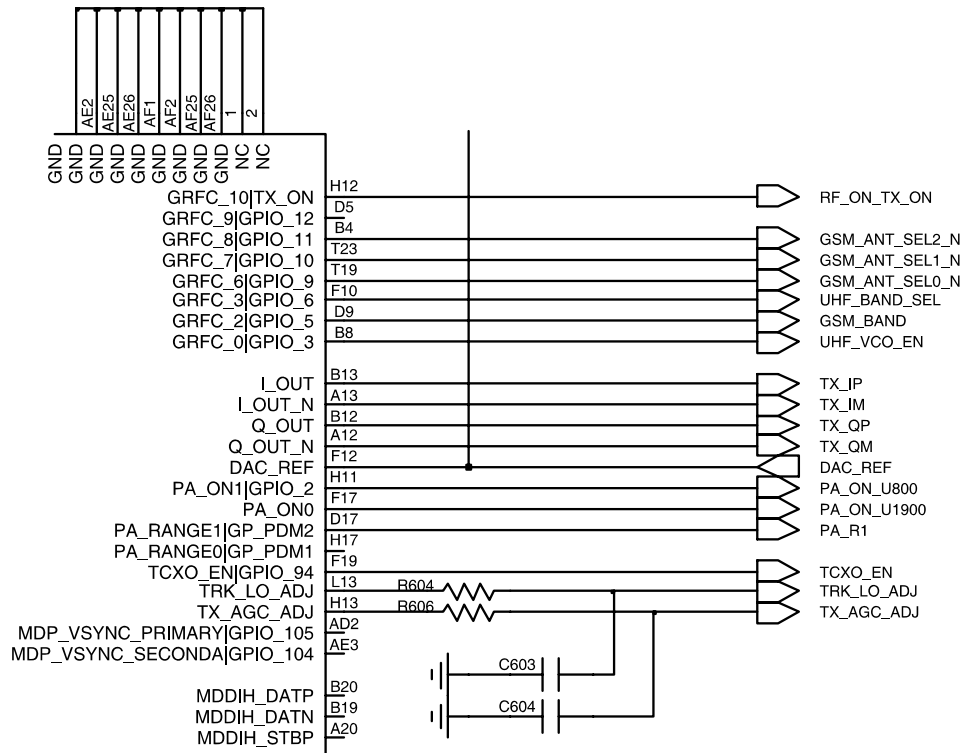


U300 & neighboring circuits

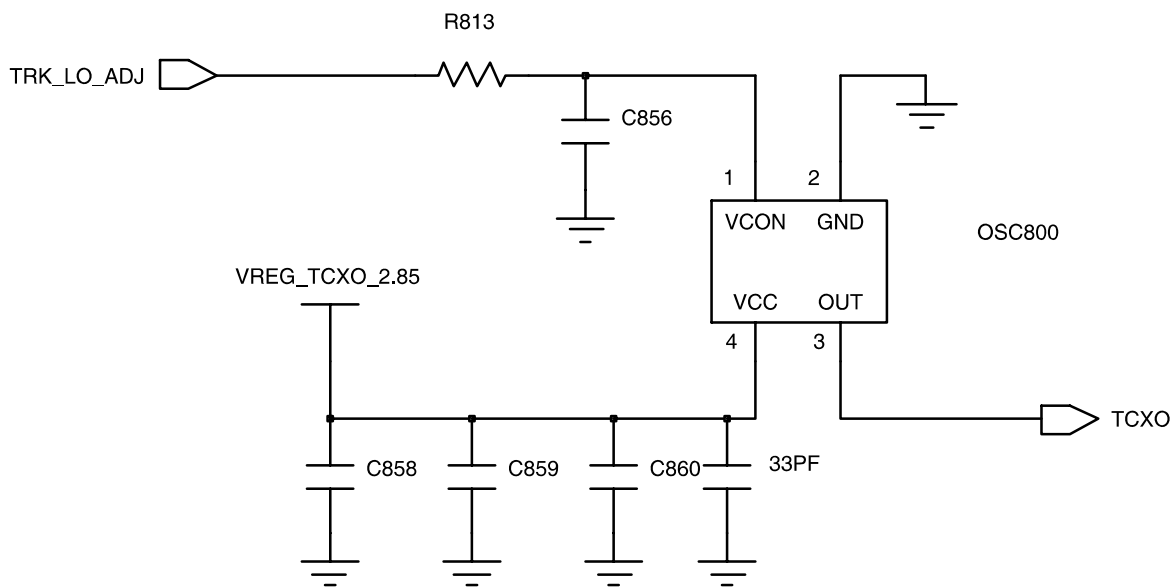




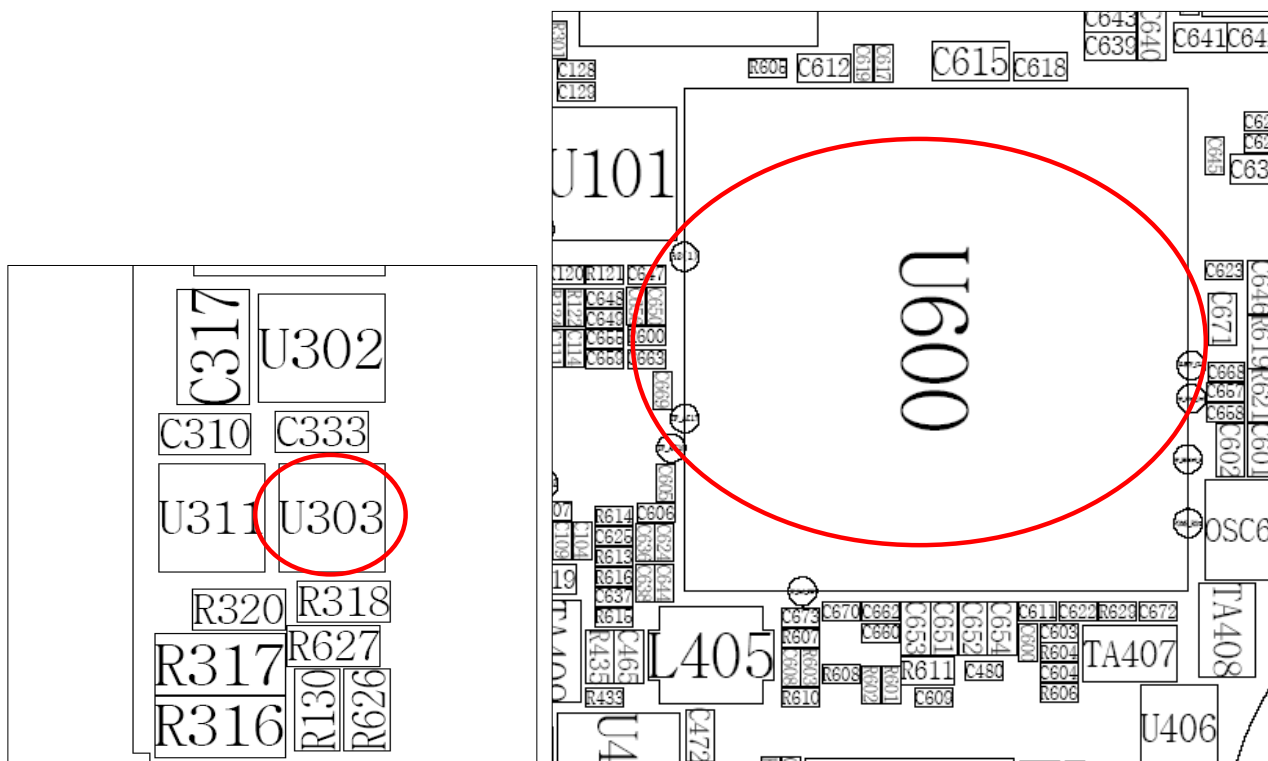
Q403 & neighboring circuits

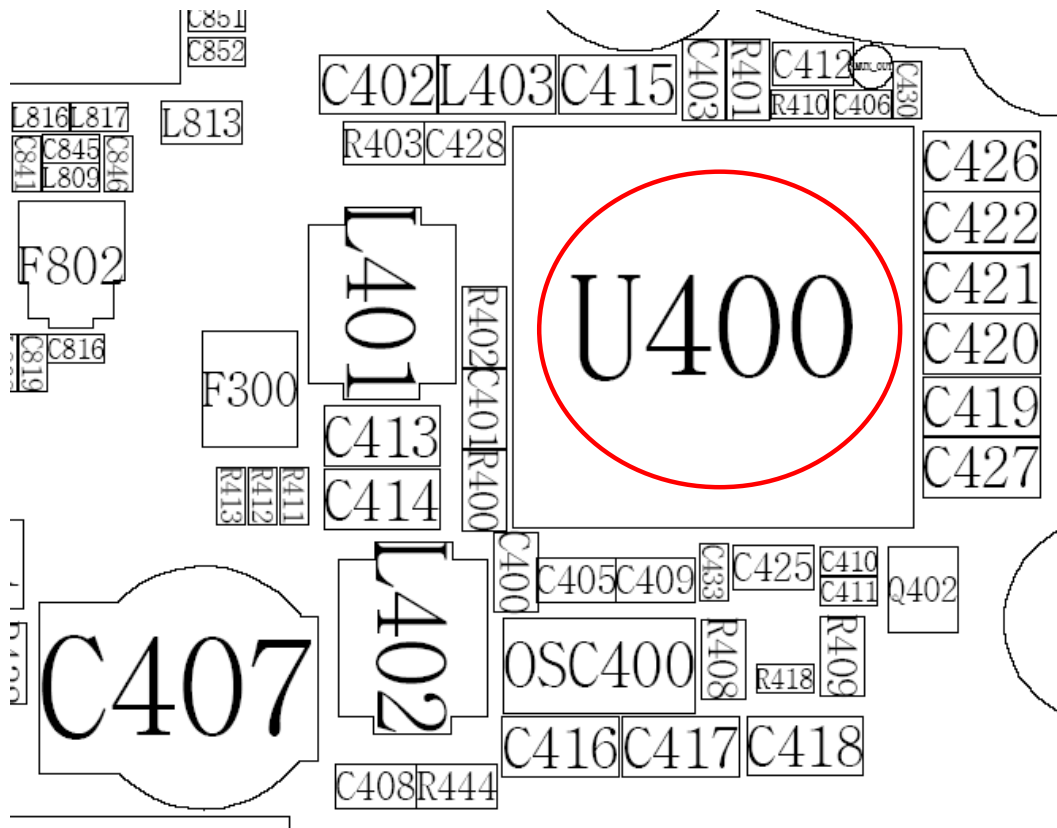
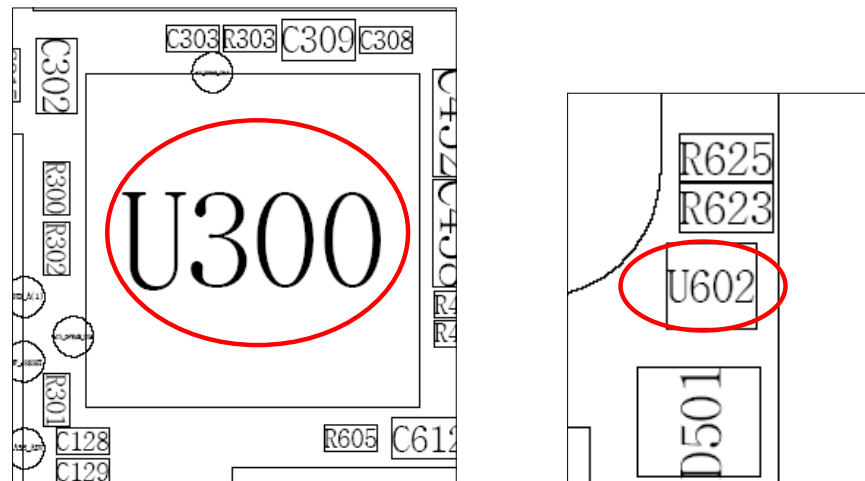


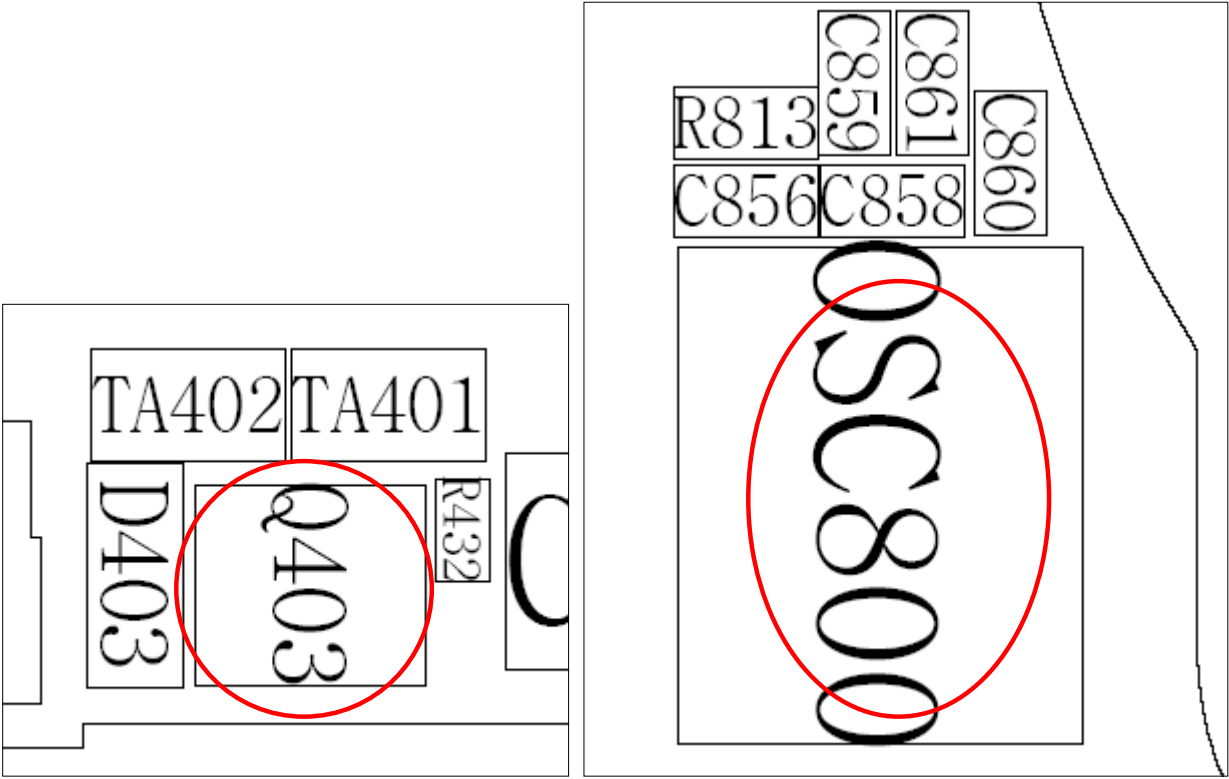
U600 & neighboring circuits



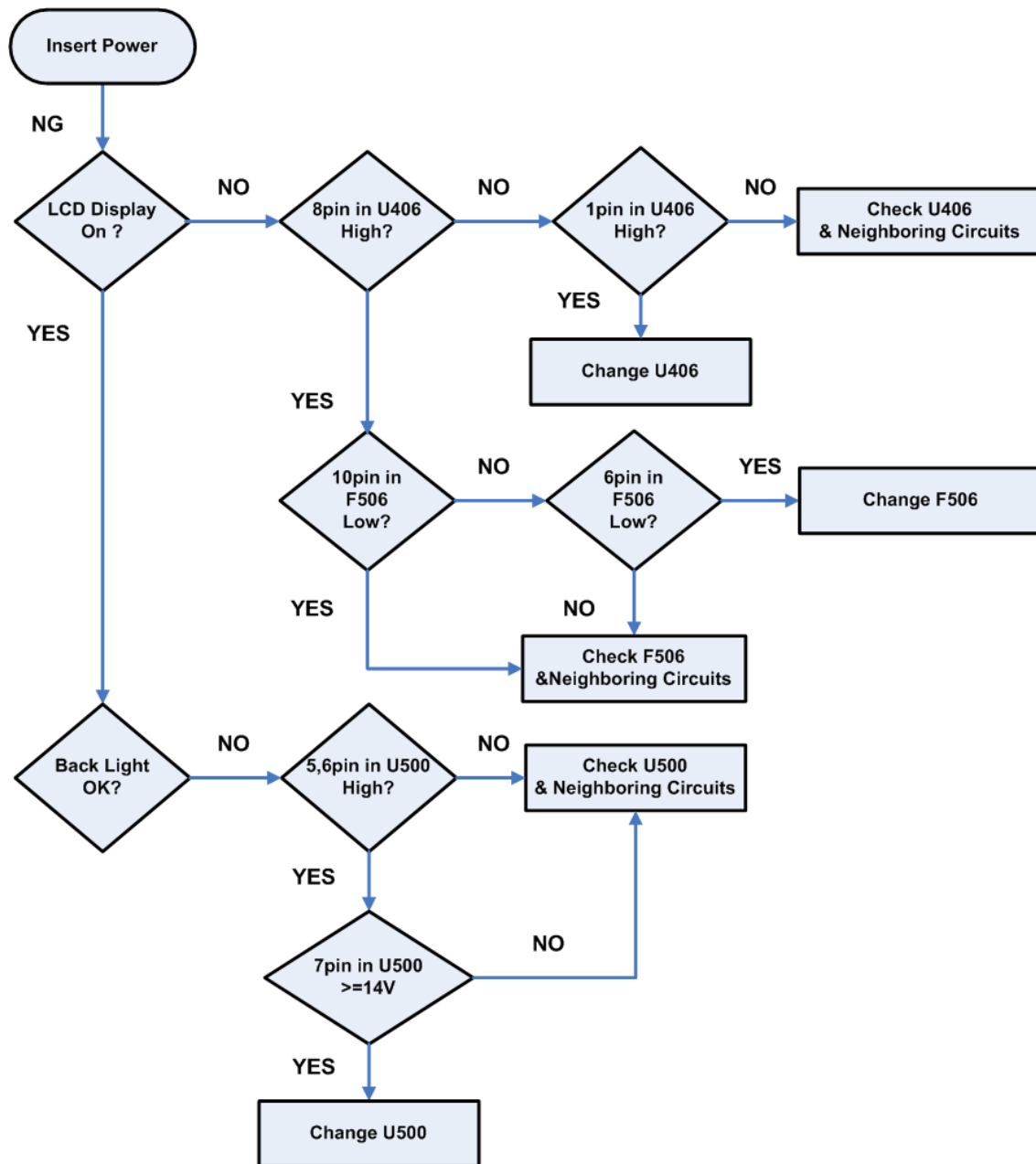
OSC800 & neighboring circuits

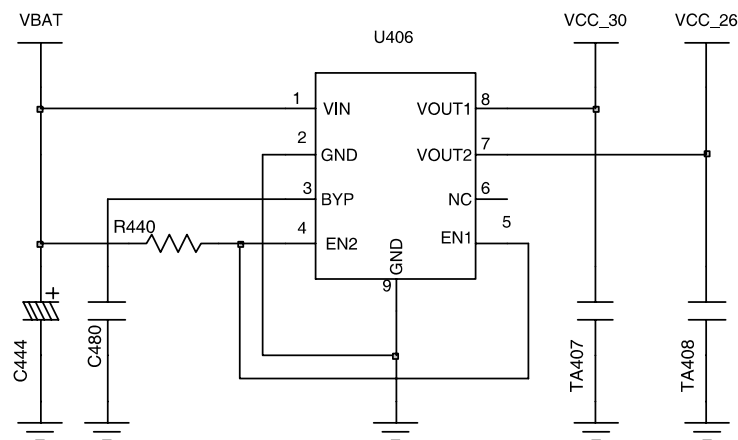




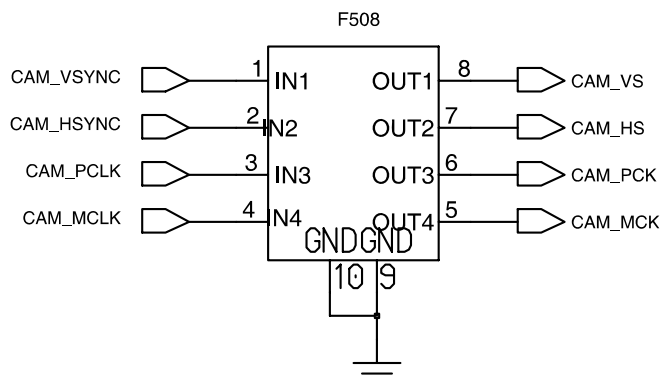


9-2. LCD Working

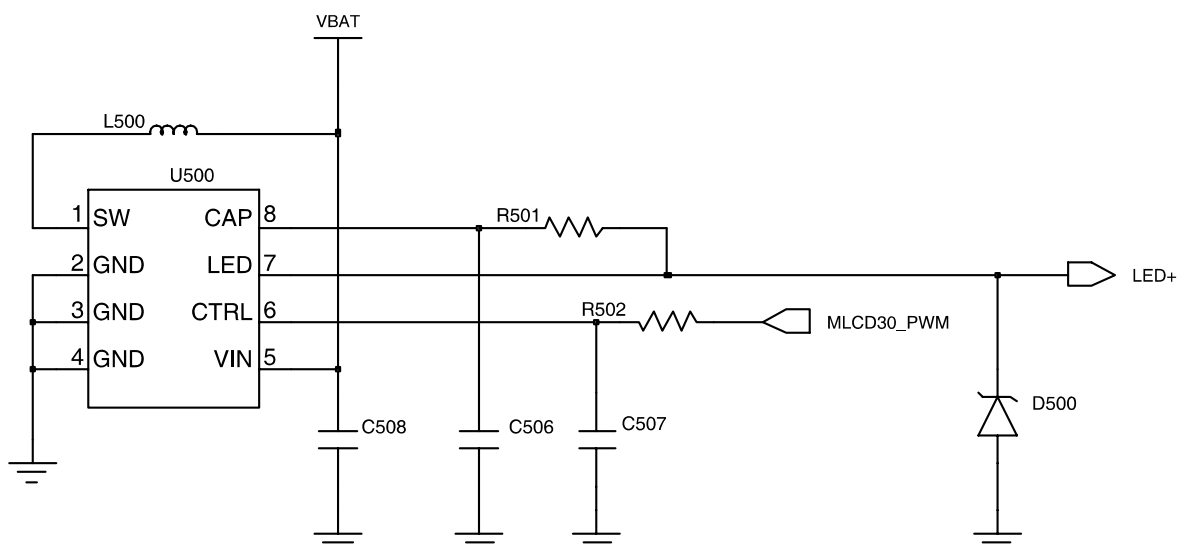




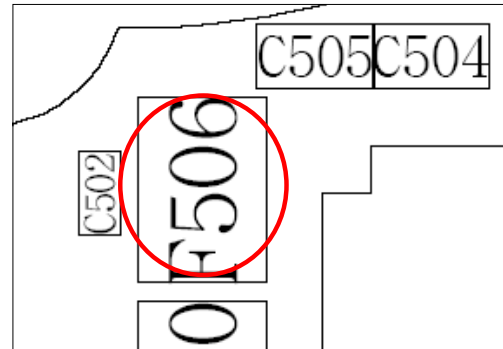
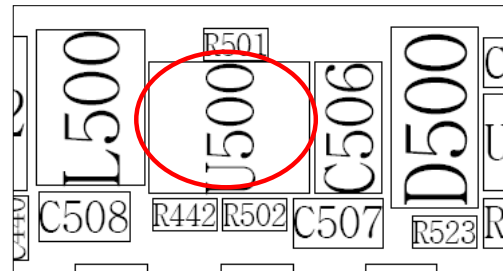
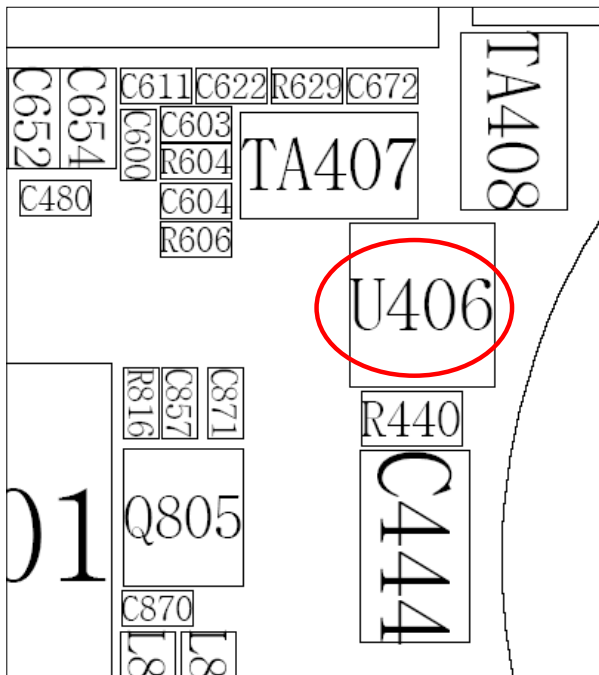
U406 & neighboring circuits



F506 & neighboring circuits

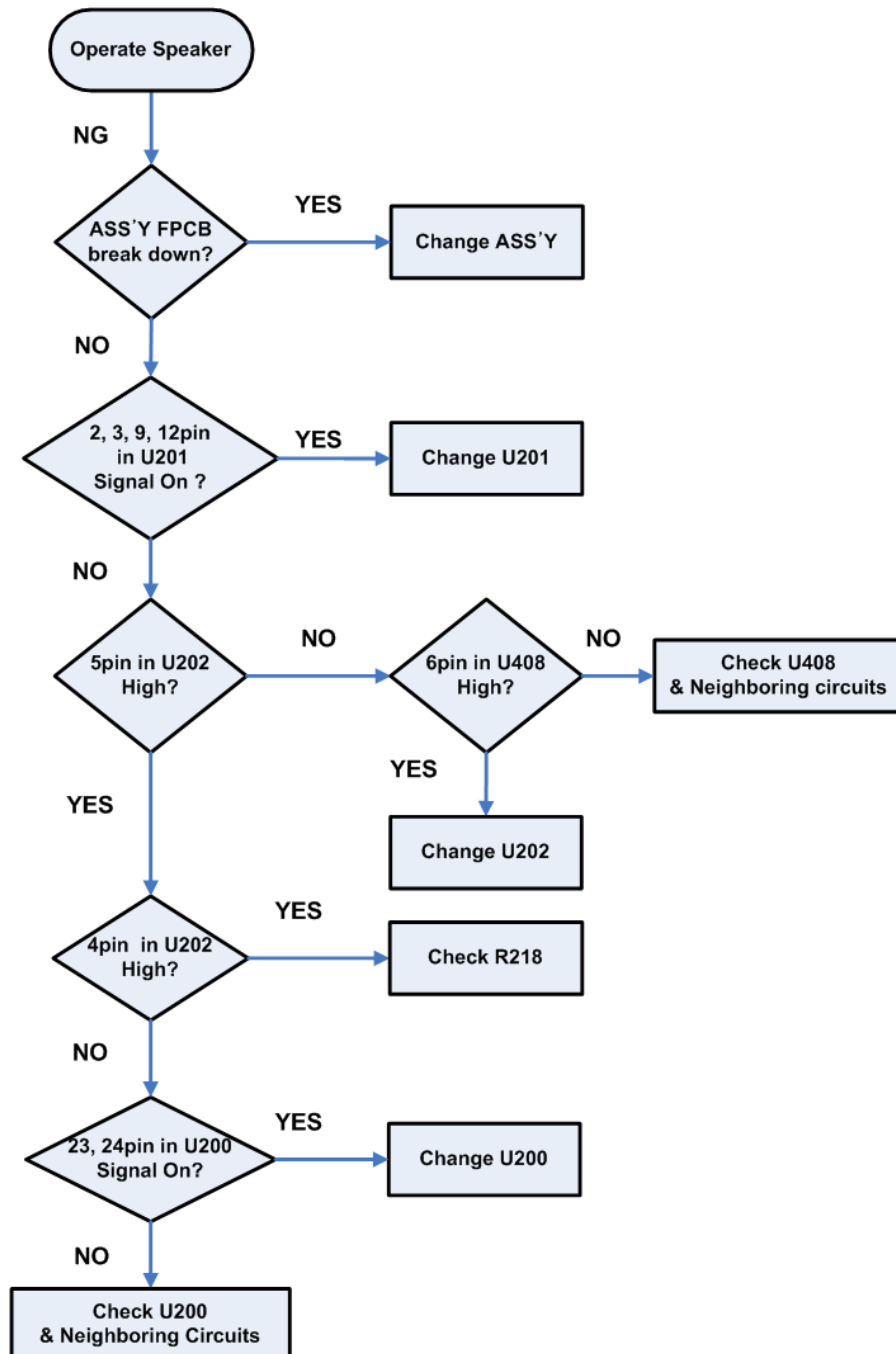


U500 & neighboring circuits

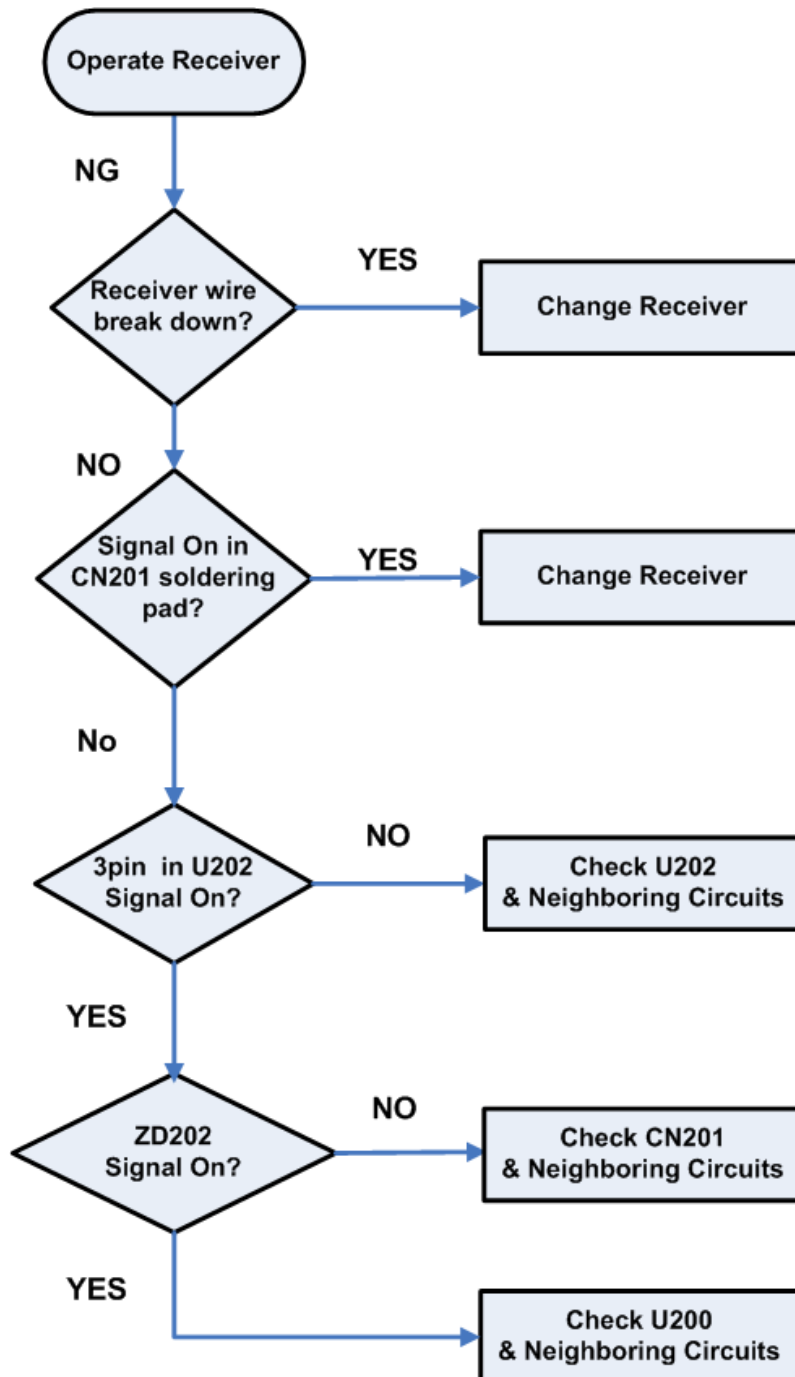


9-3. Audio Working

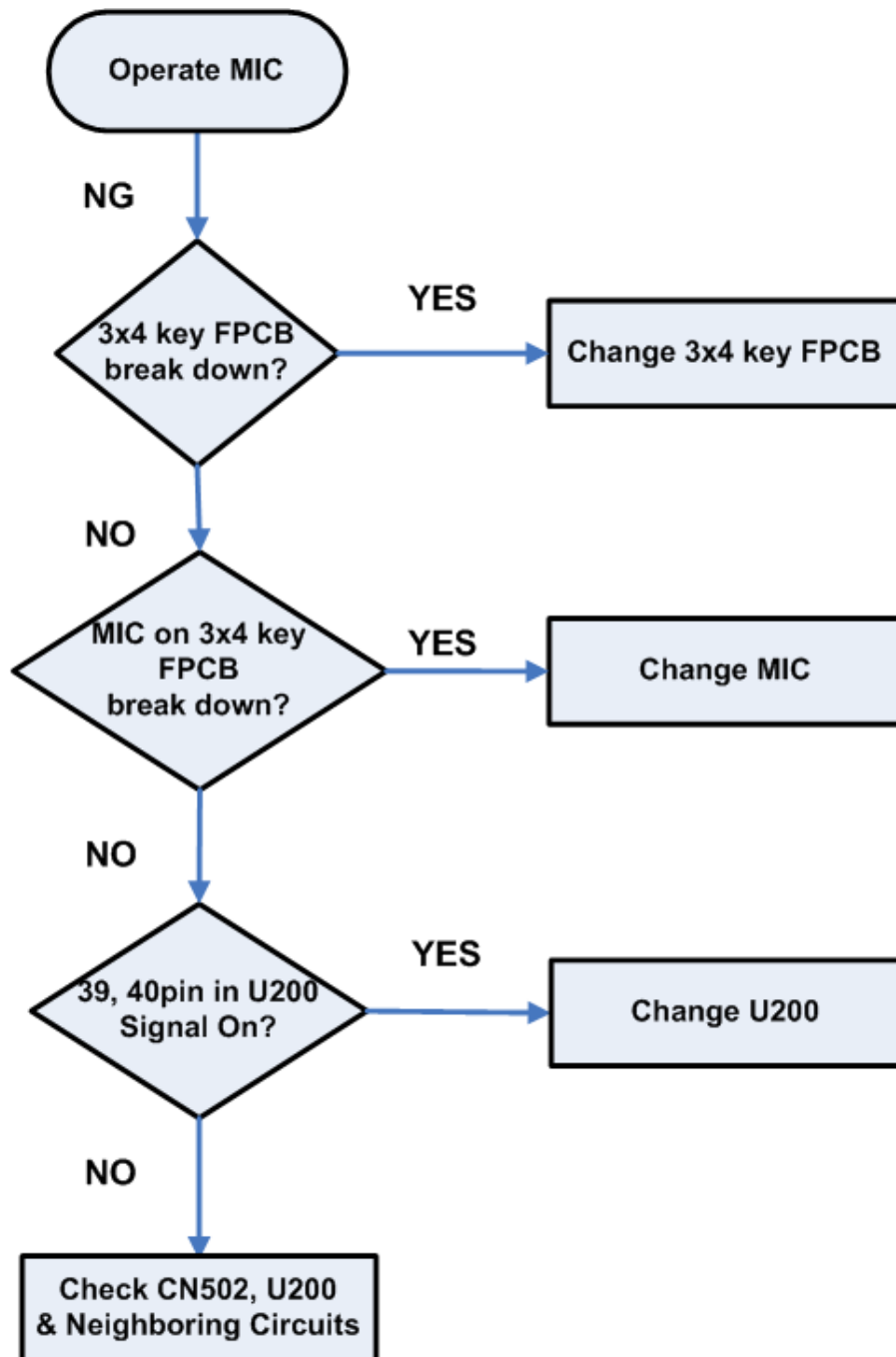
- Speaker Working



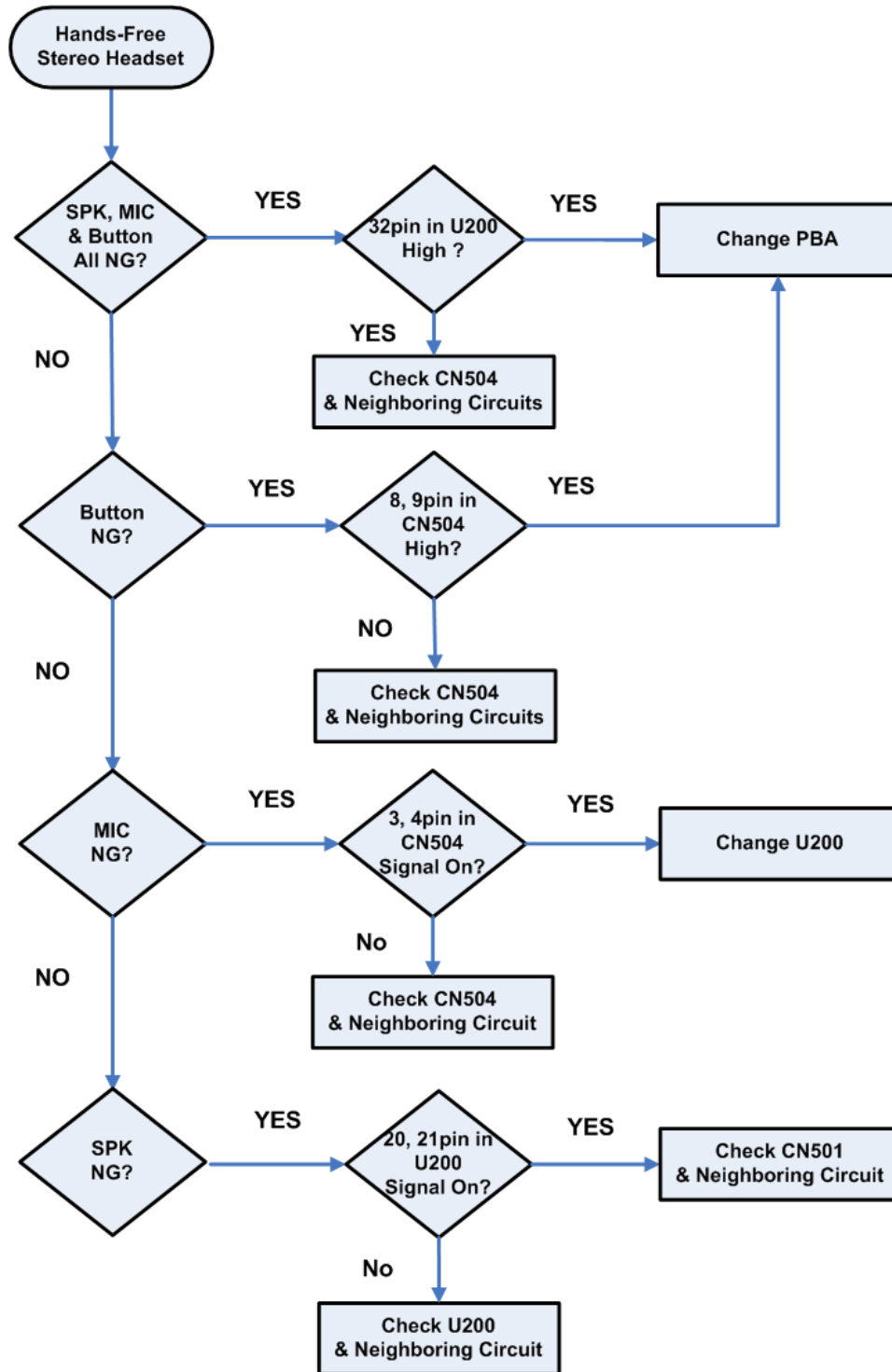
- Receiver Working

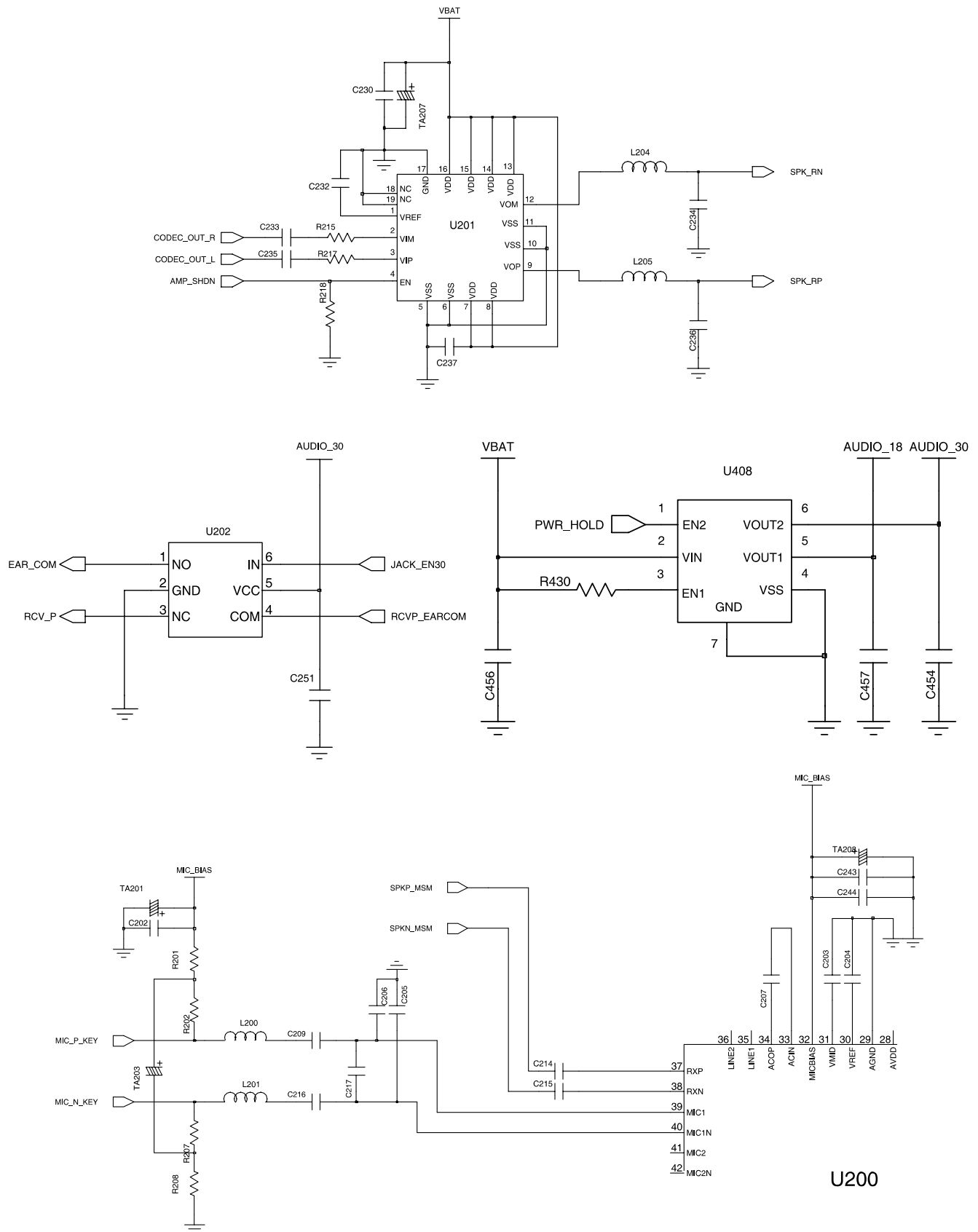


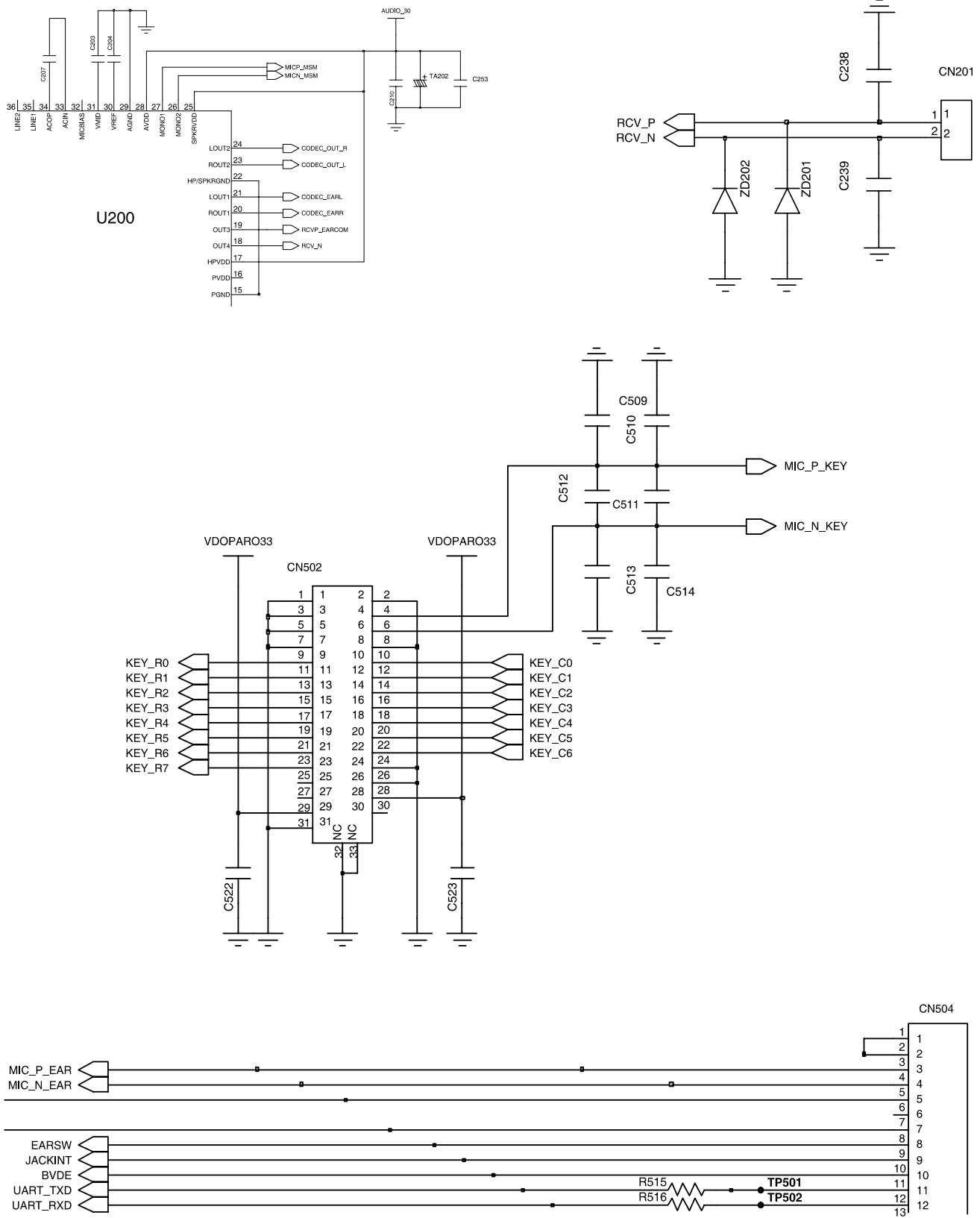
● MIC Working

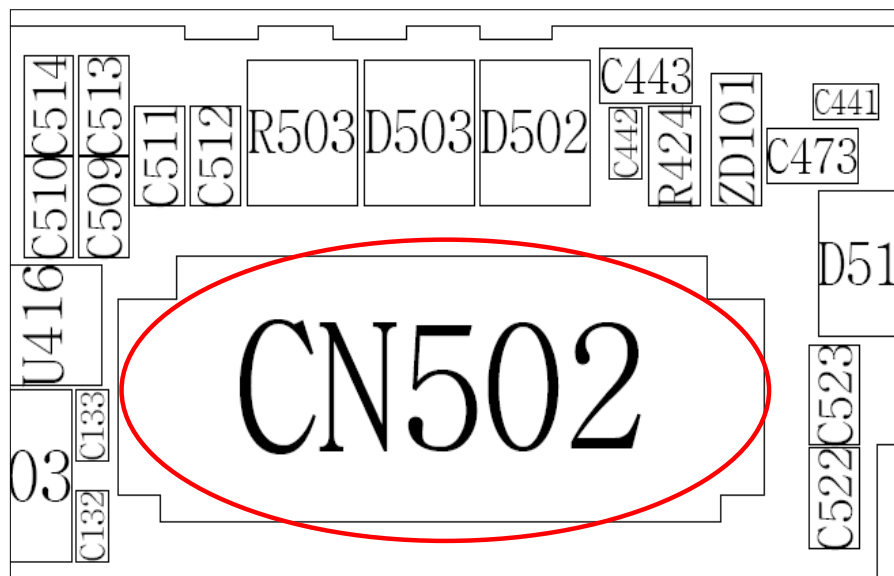
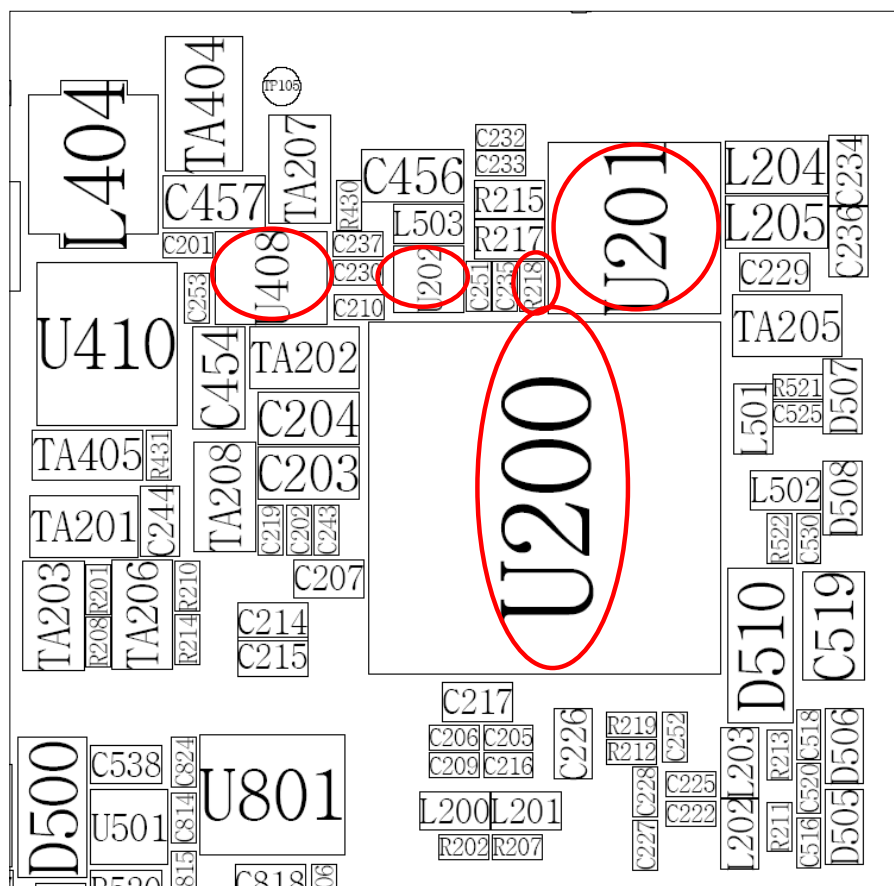


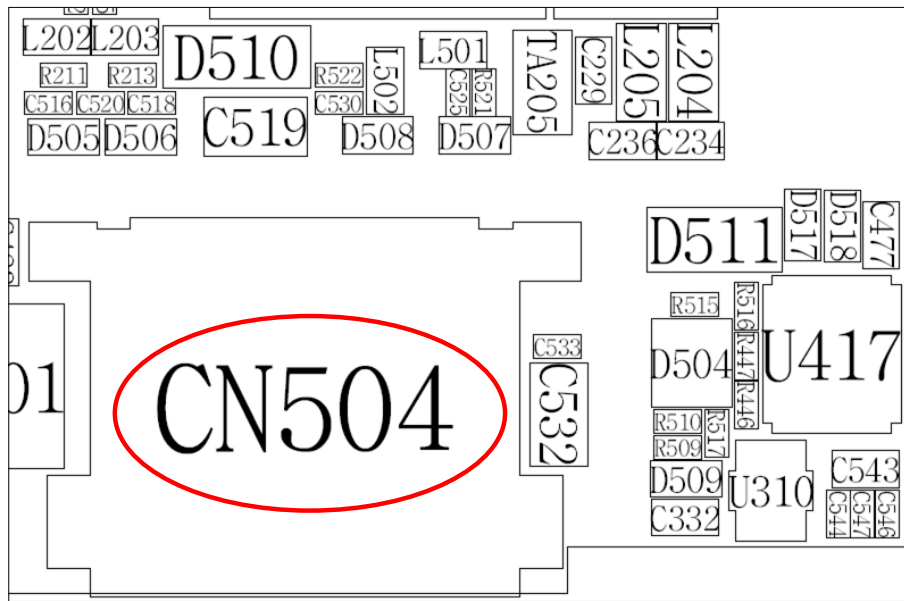
● Hands-Free Stereo Headset Working



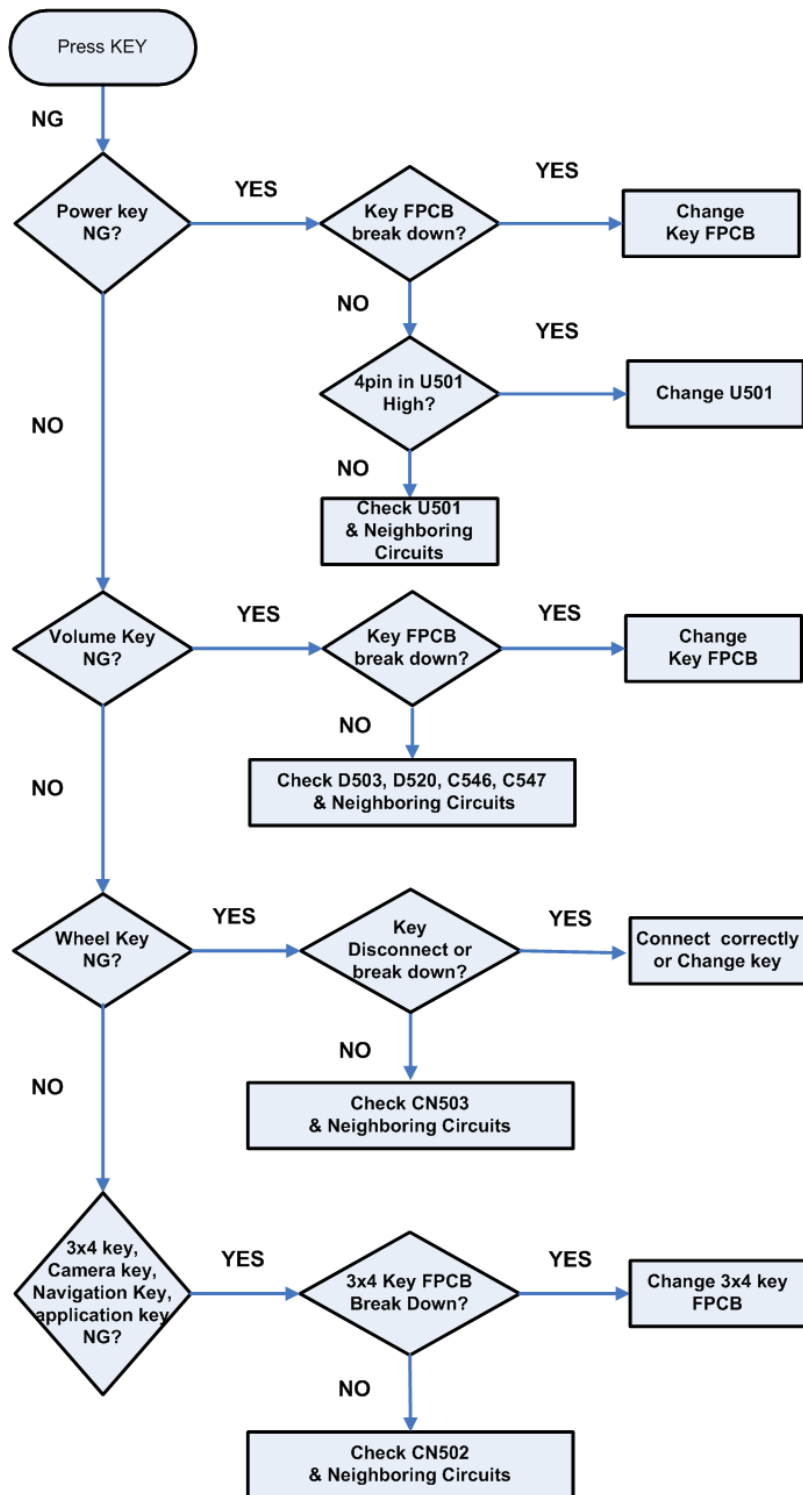


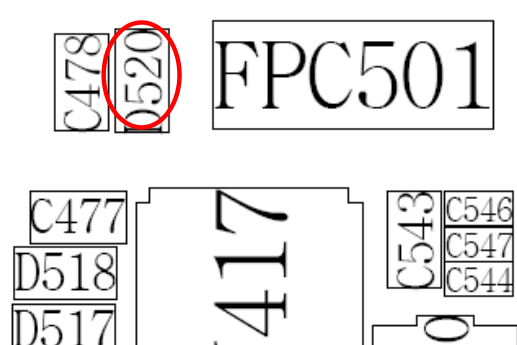
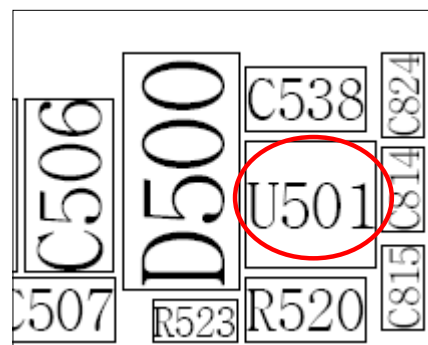
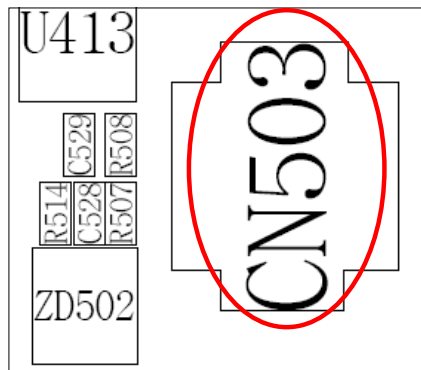
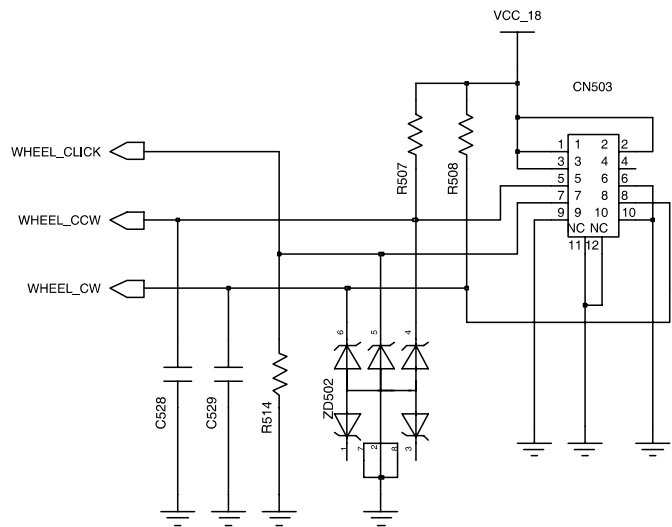
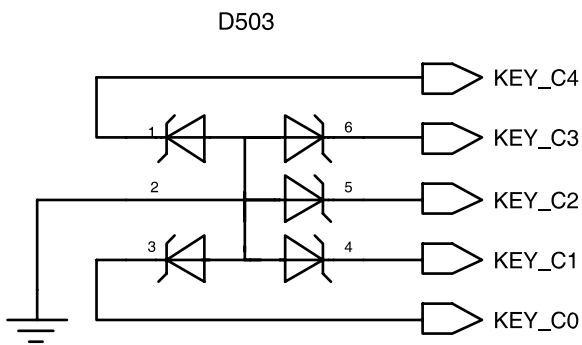
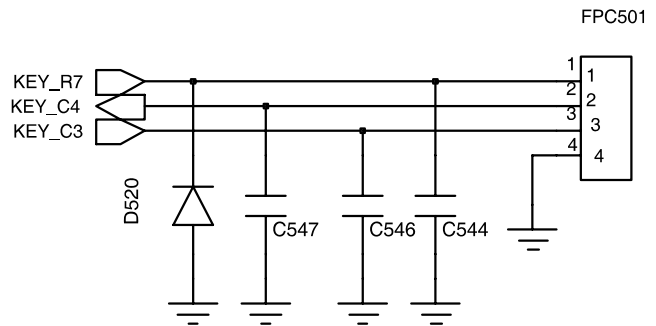
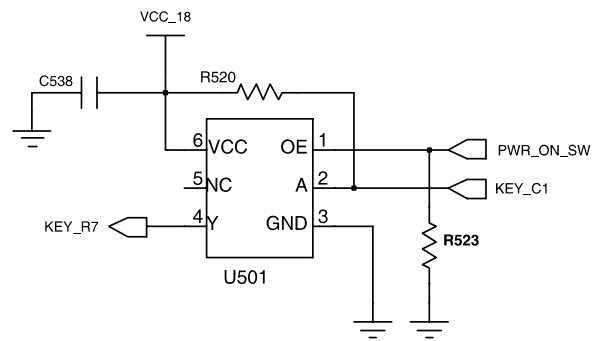




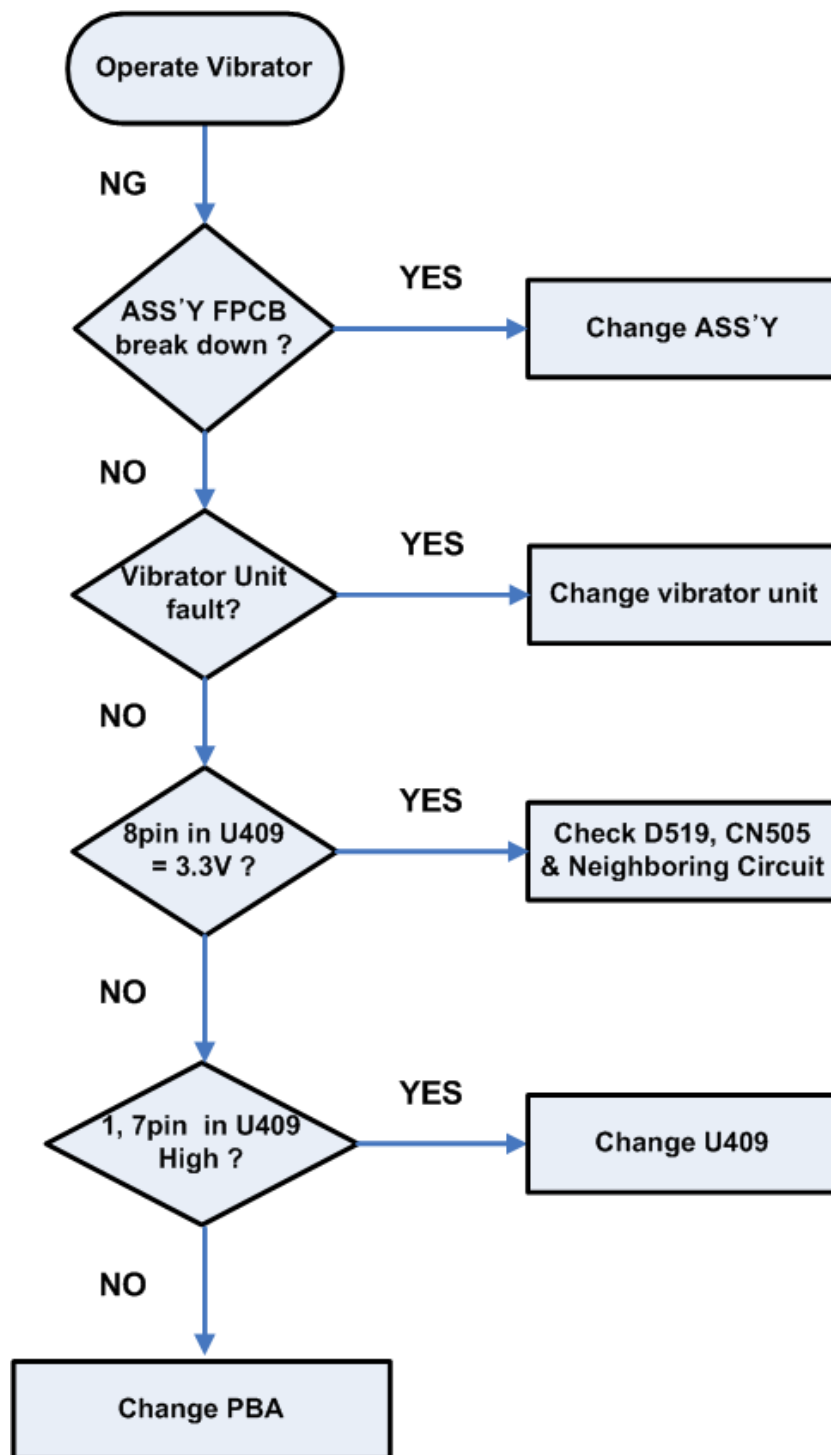


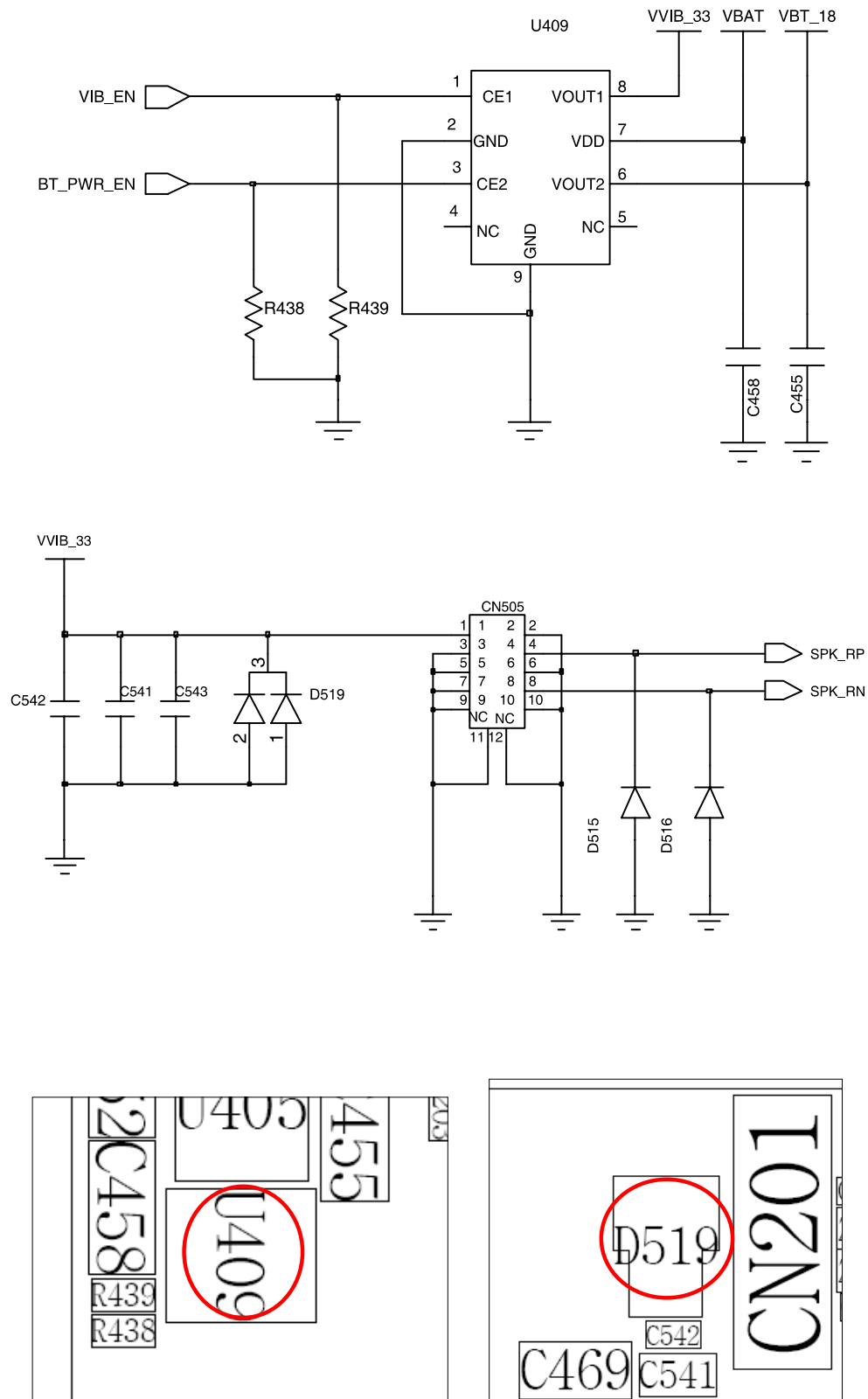
9-4. KEY Working



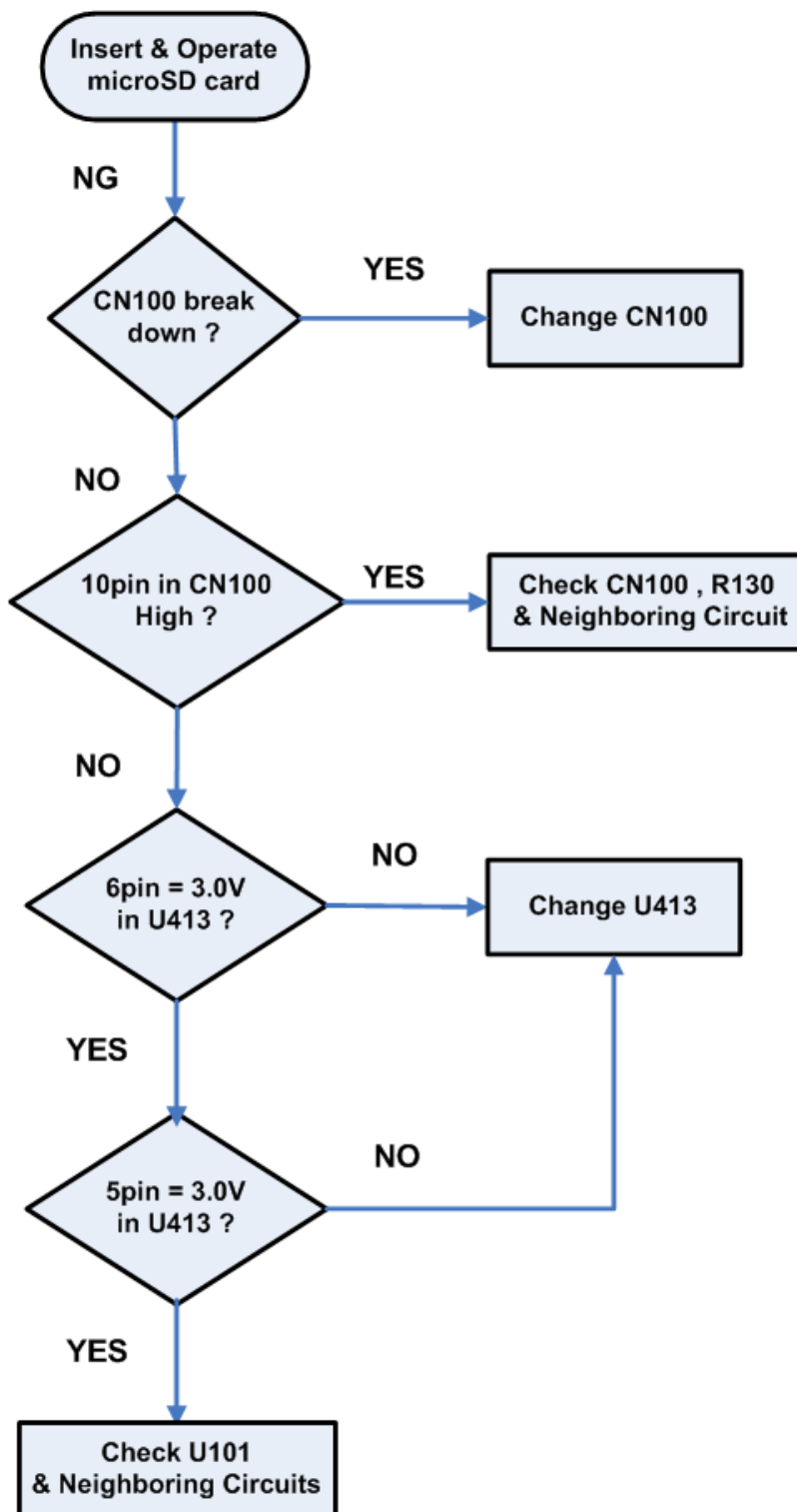


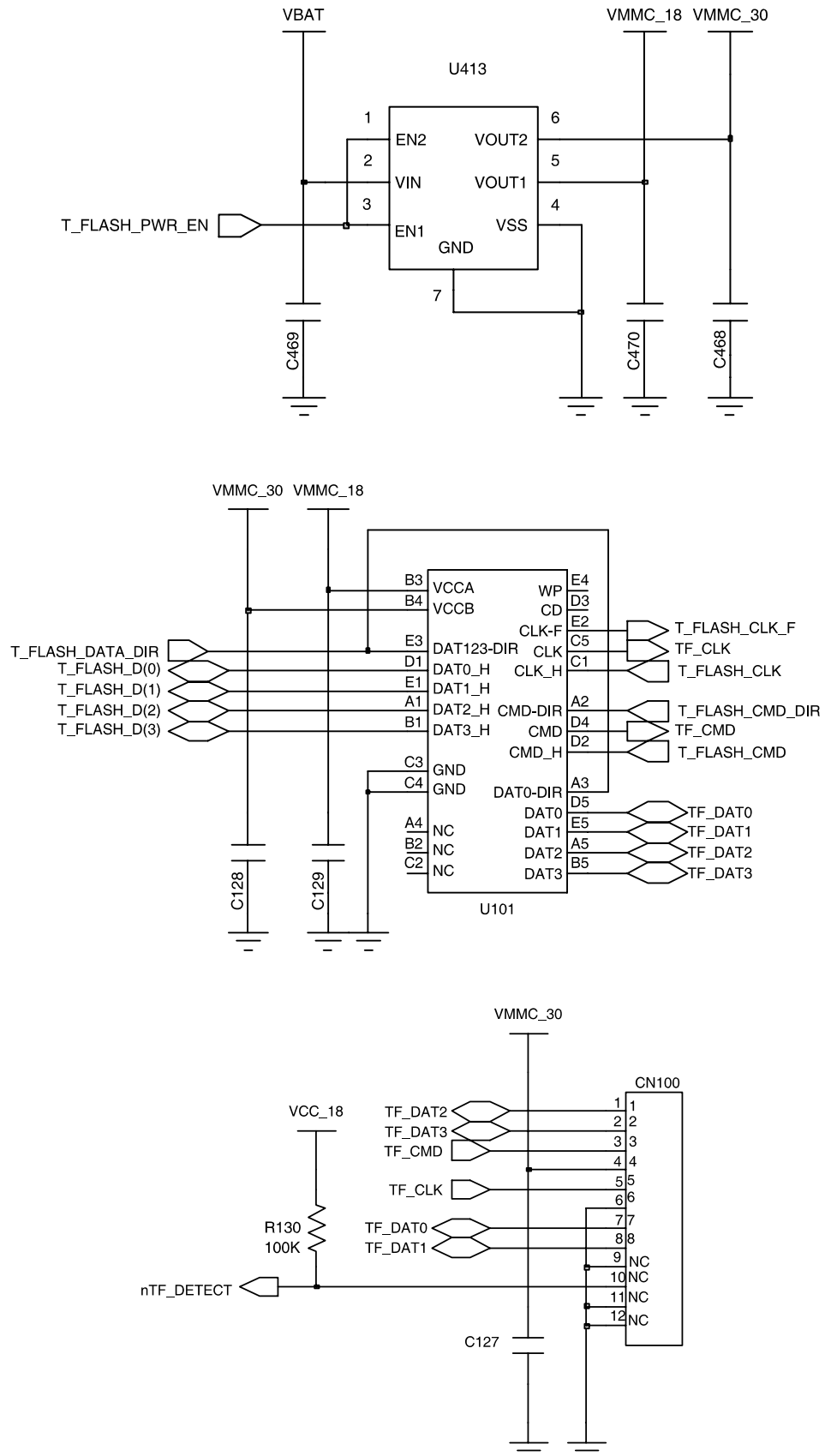
9-5. Vibrator Working

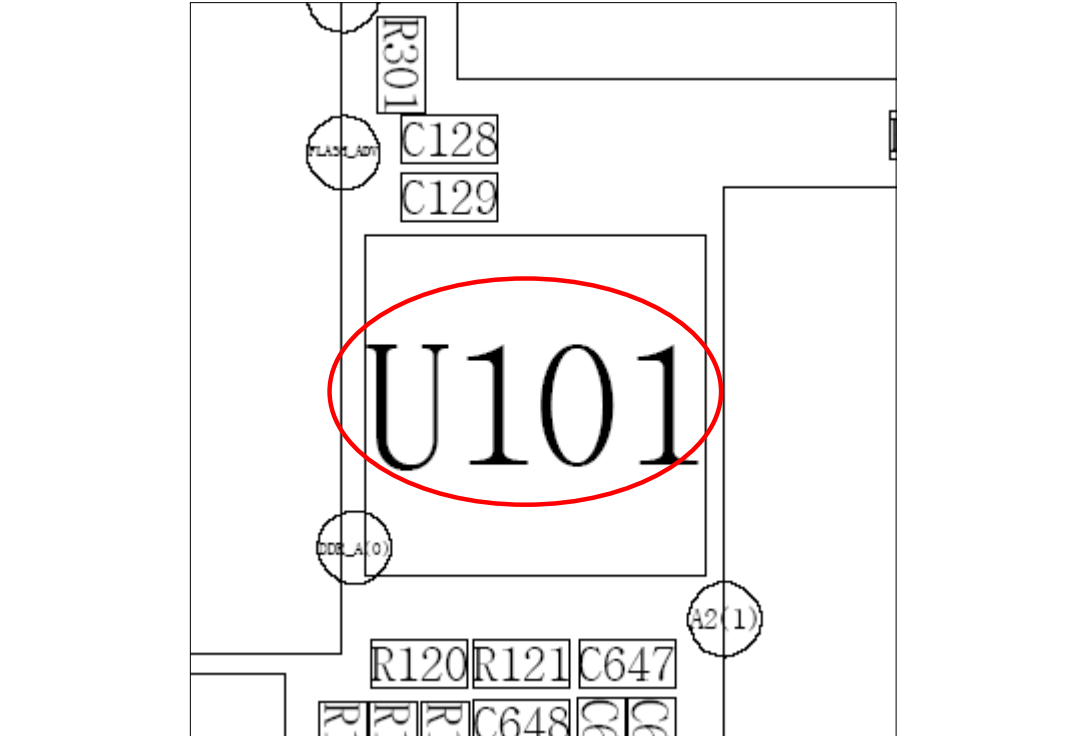




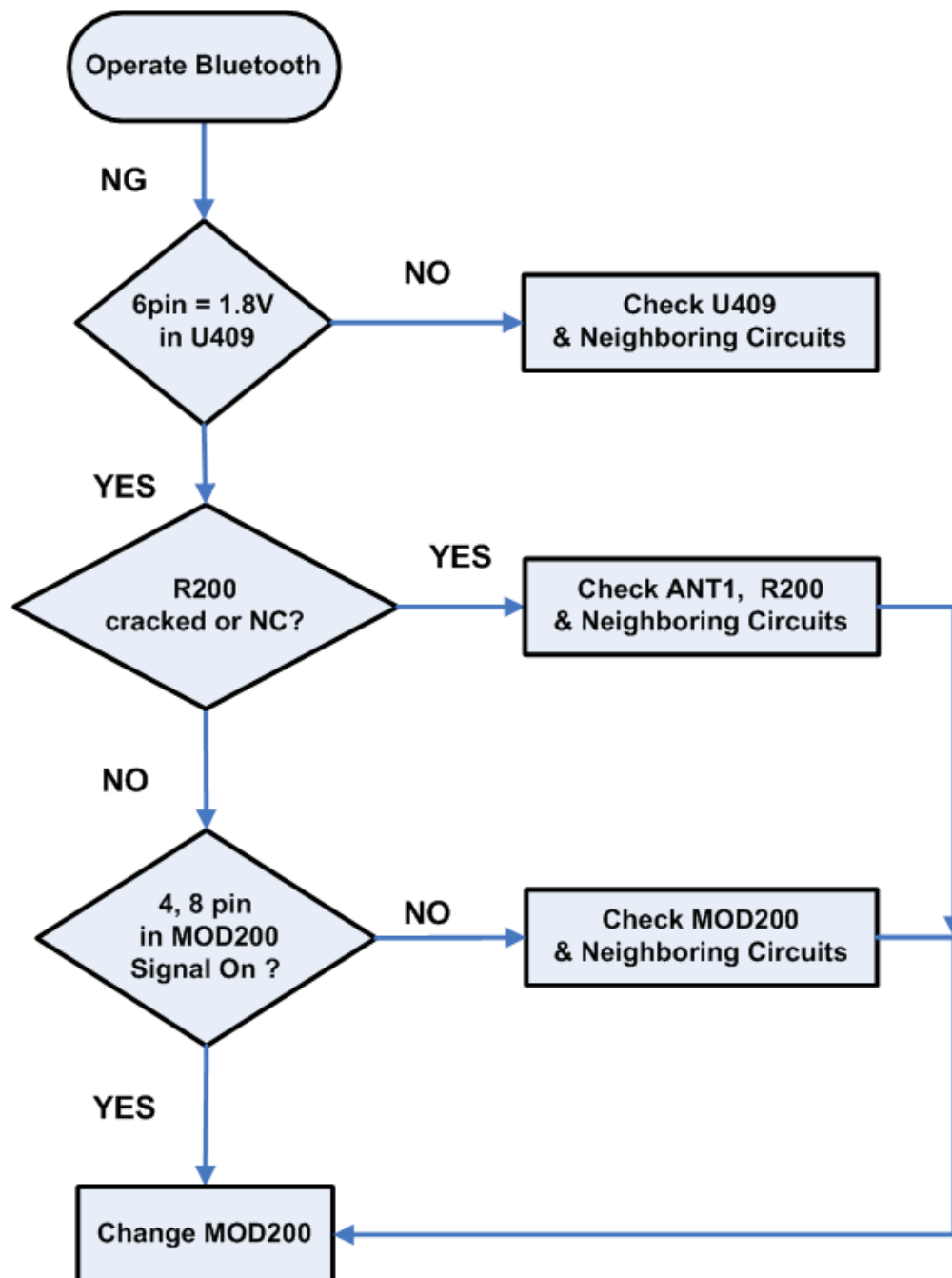
9-6. T-Flash Card Working

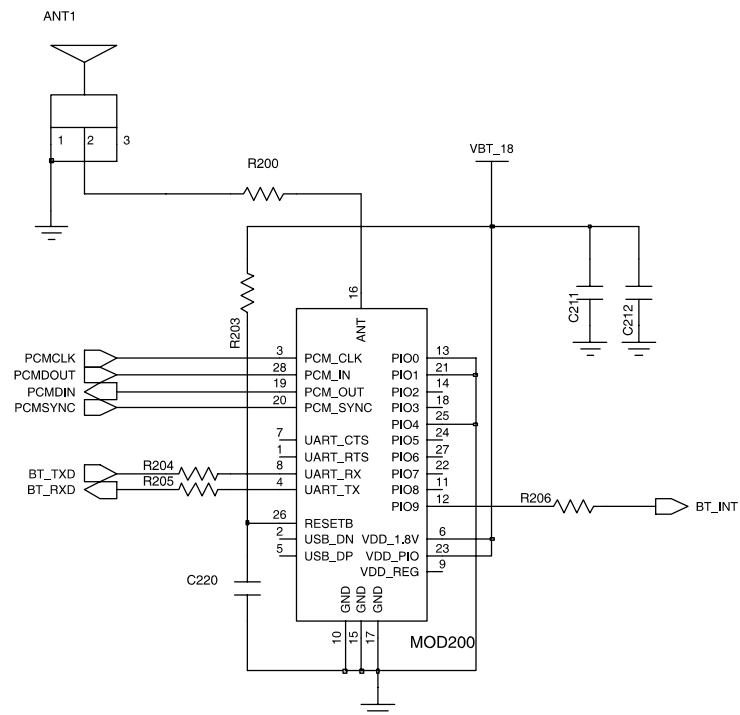




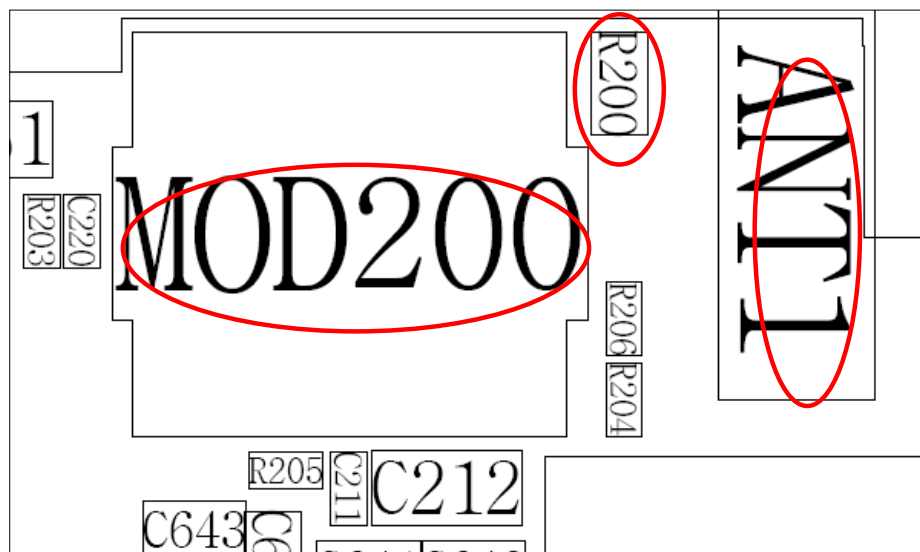


9-7. Bluetooth Working

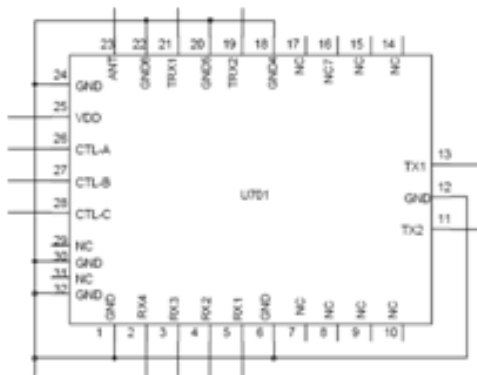
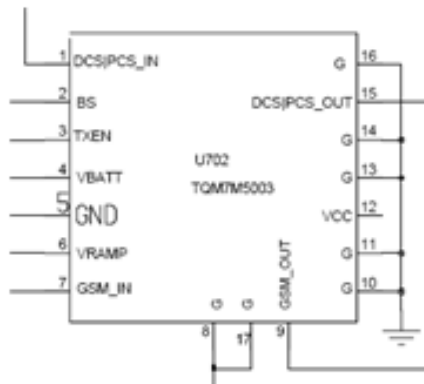
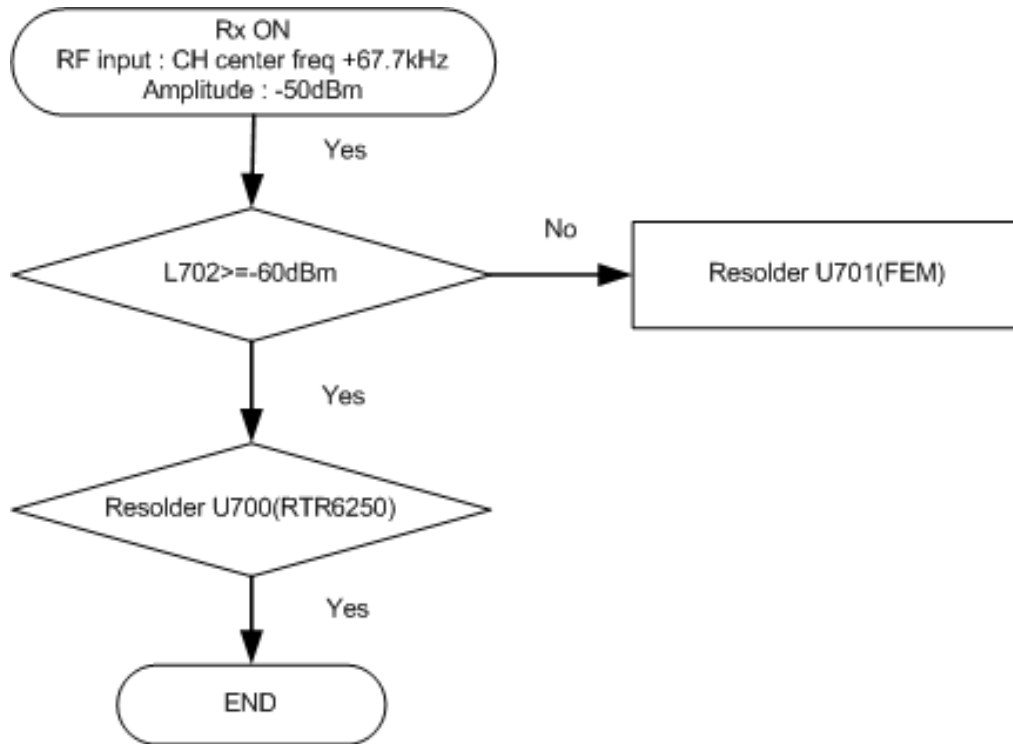


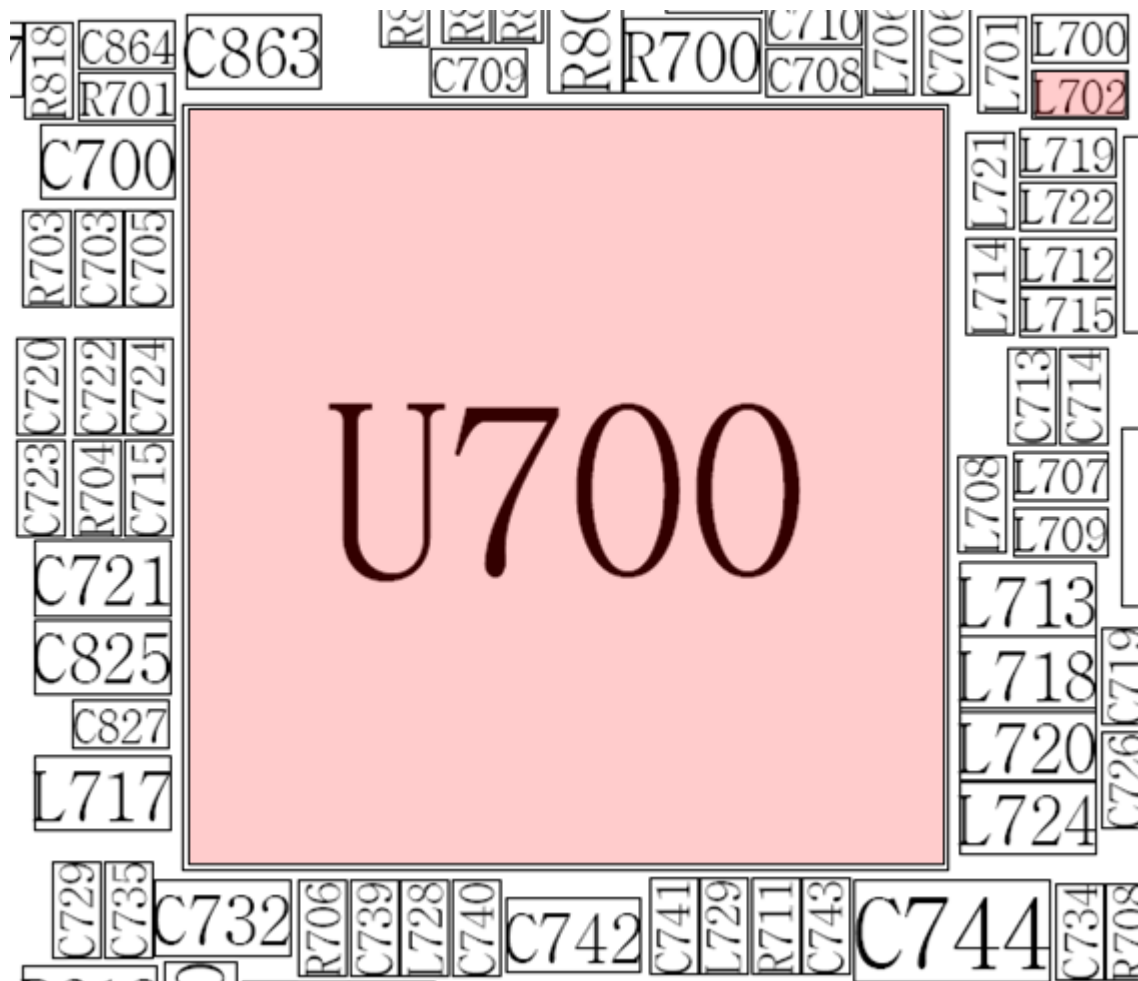


BLUETOOTH

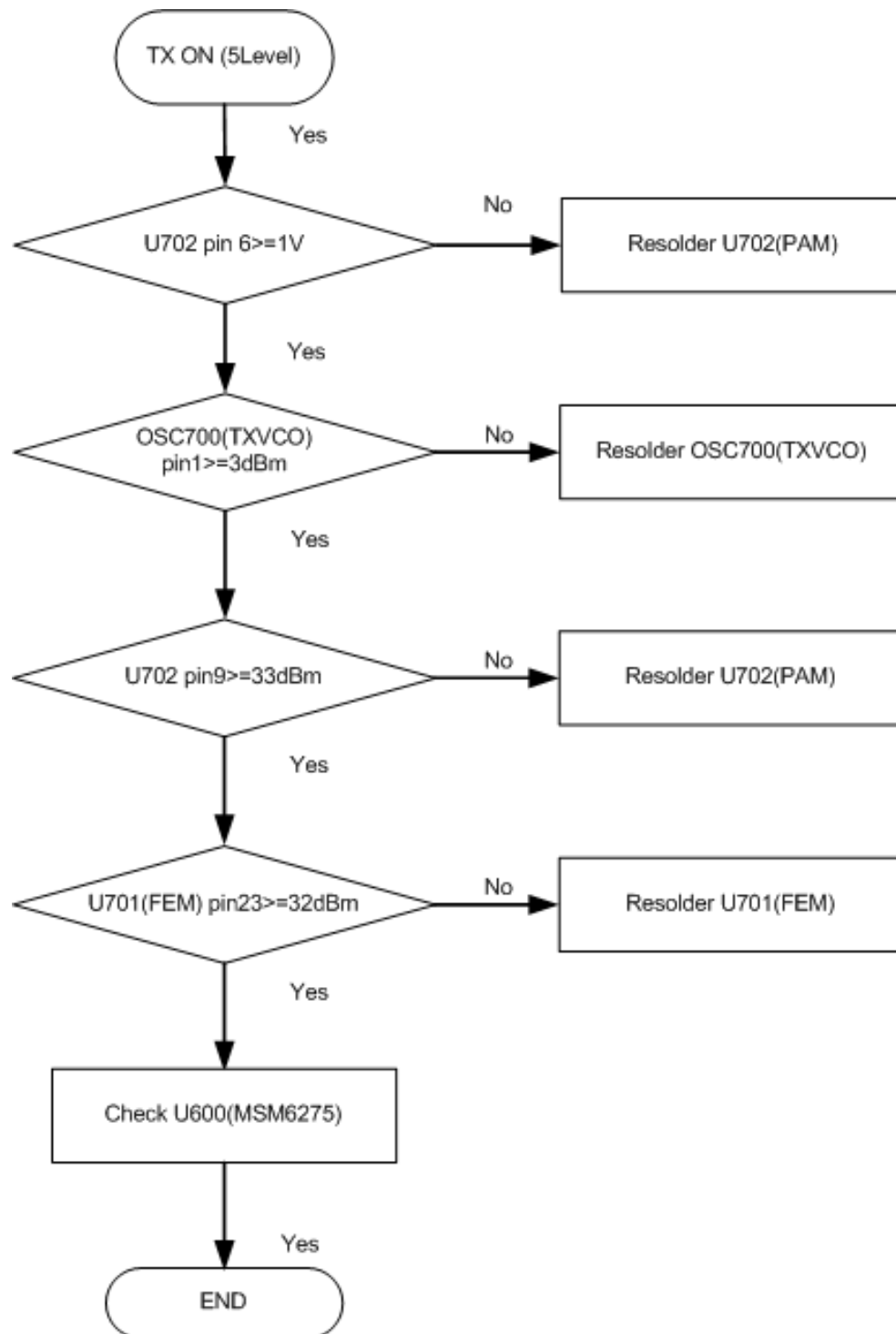


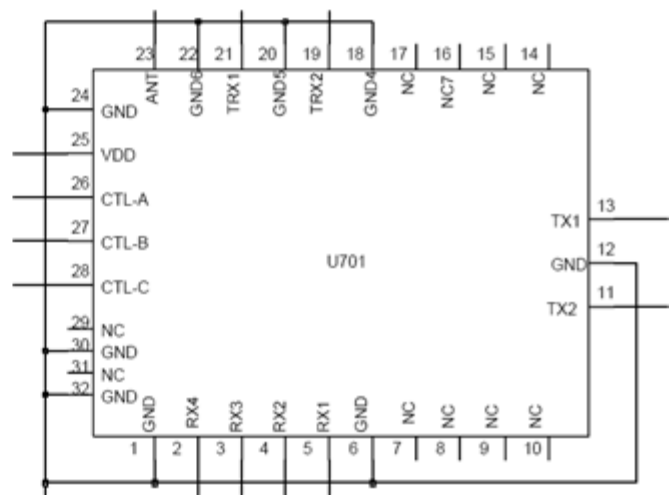
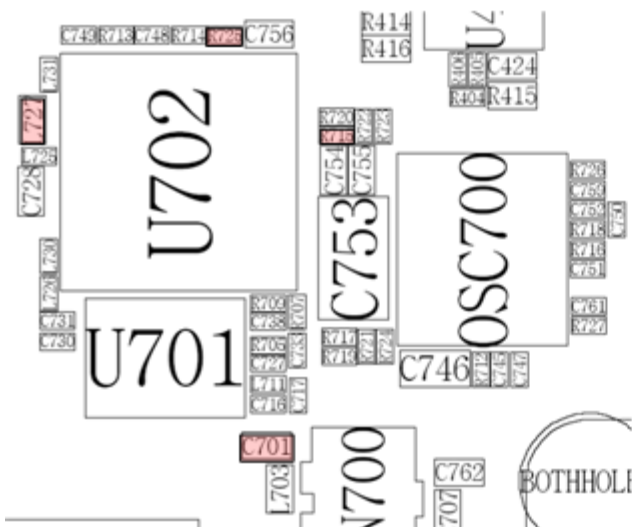
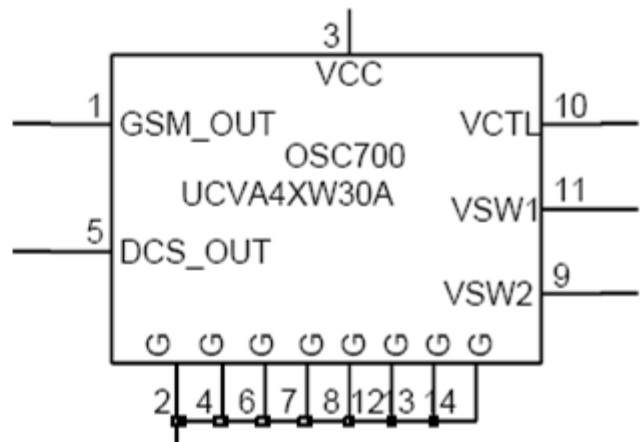
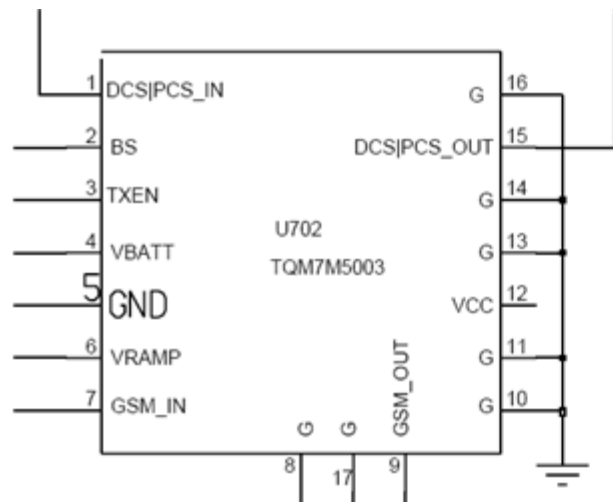
9-8. GSM Receiver



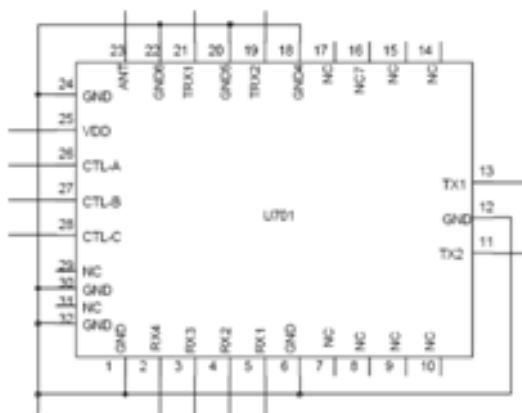
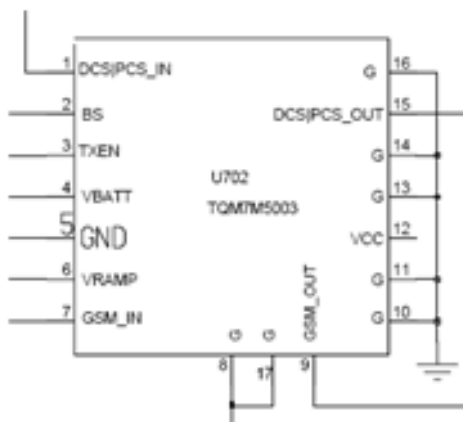
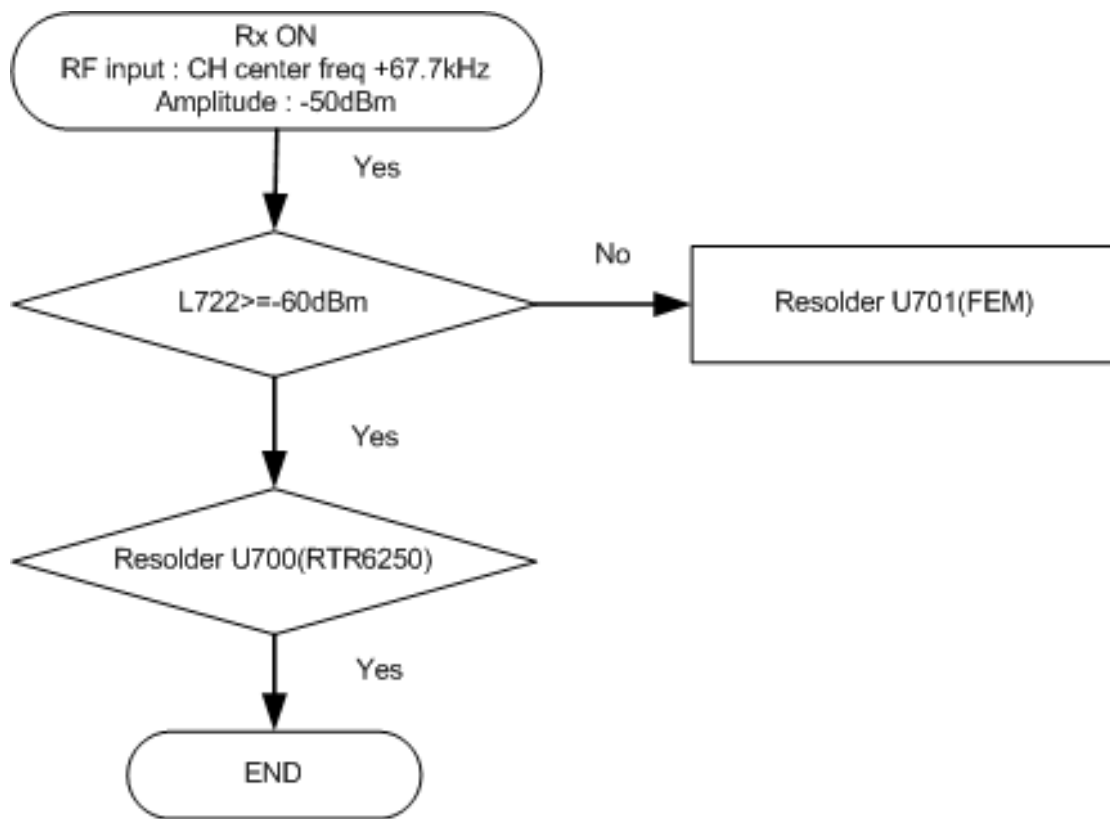


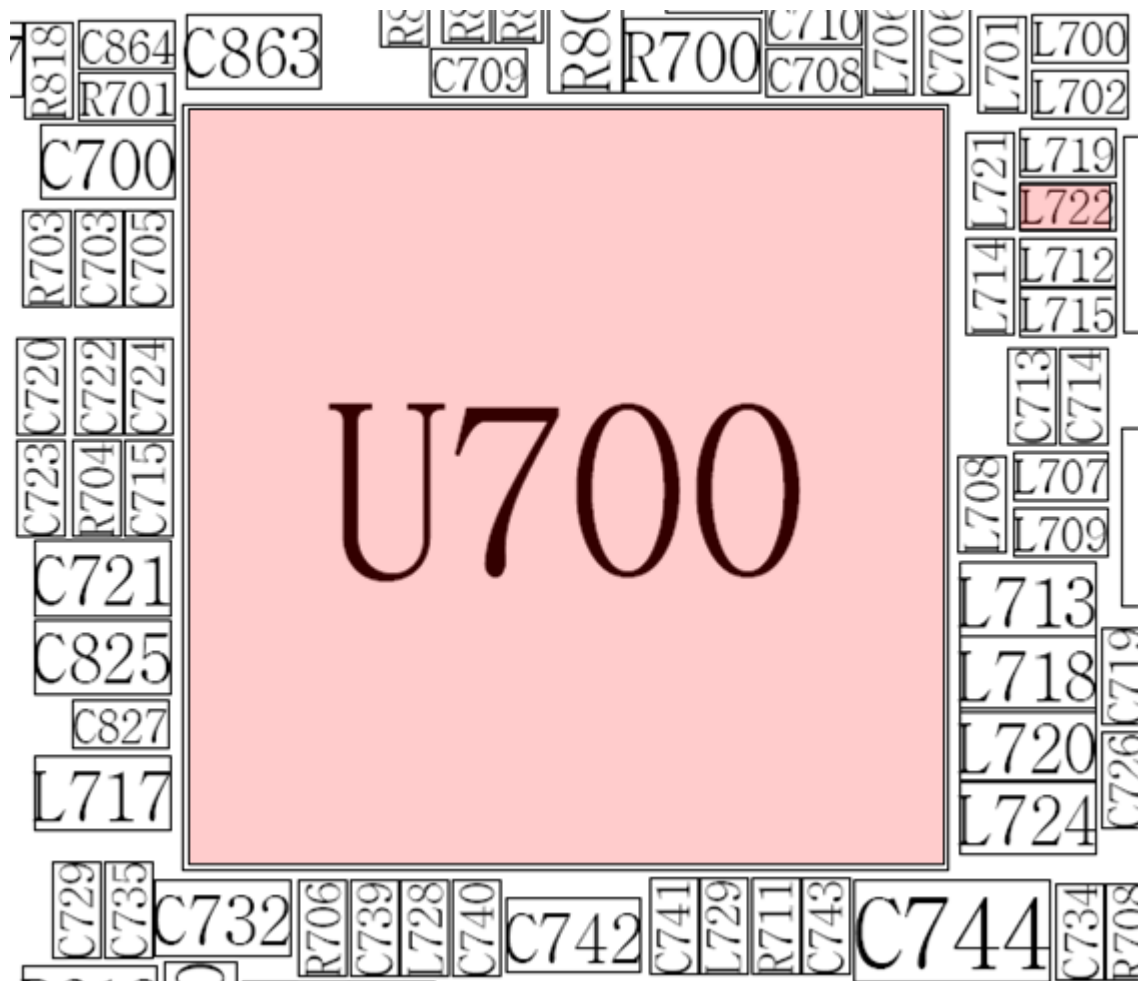
9-9. GSM Transmitter



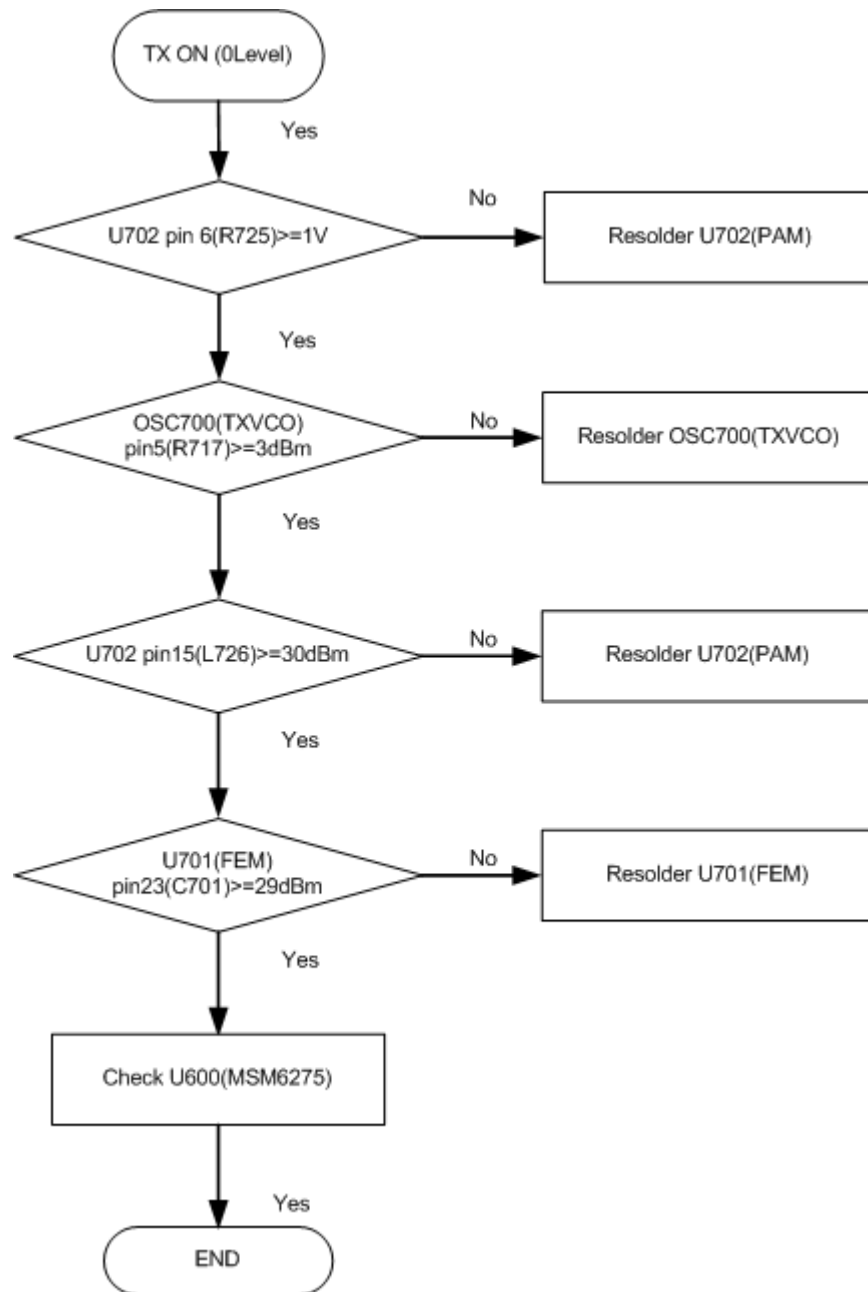


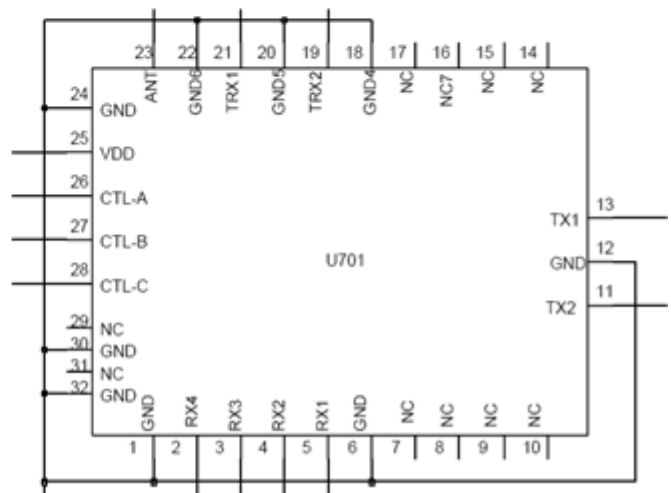
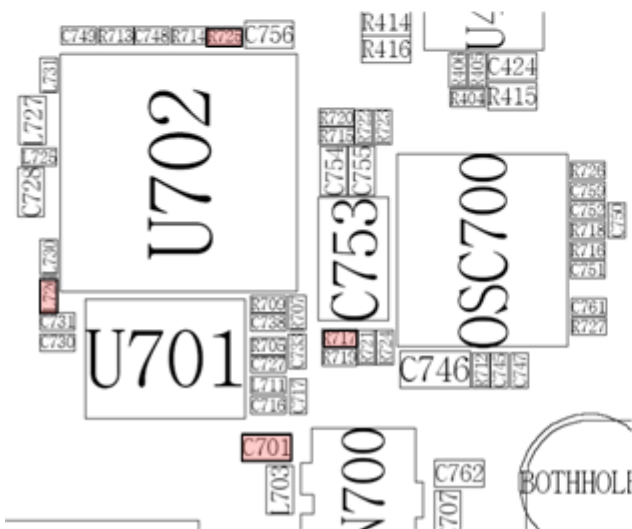
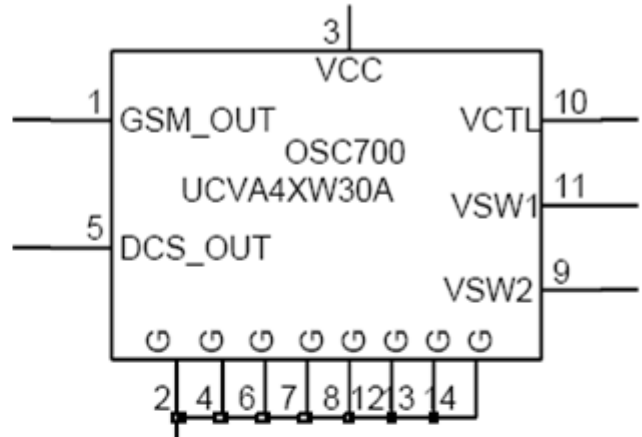
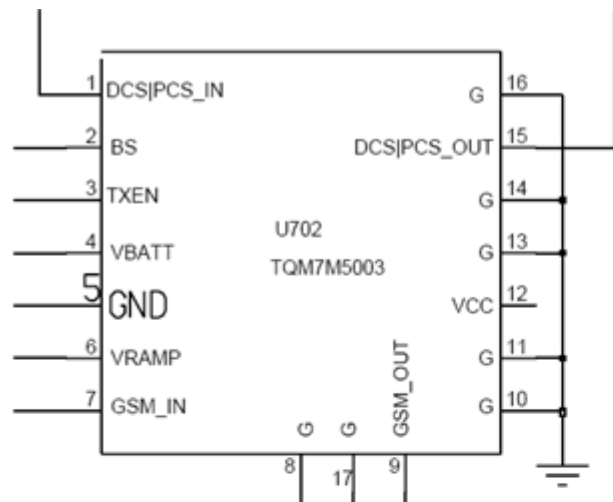
9-10. DCS Receiver



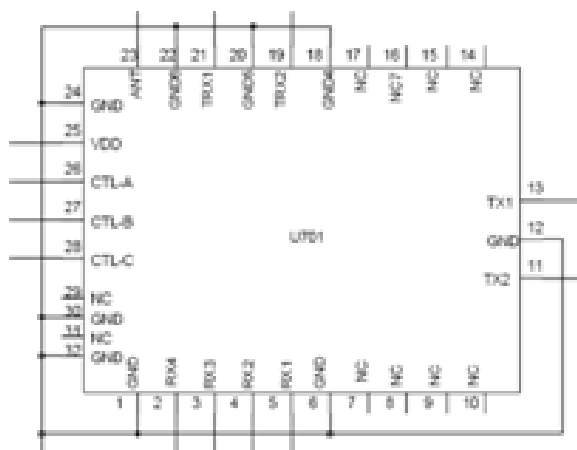
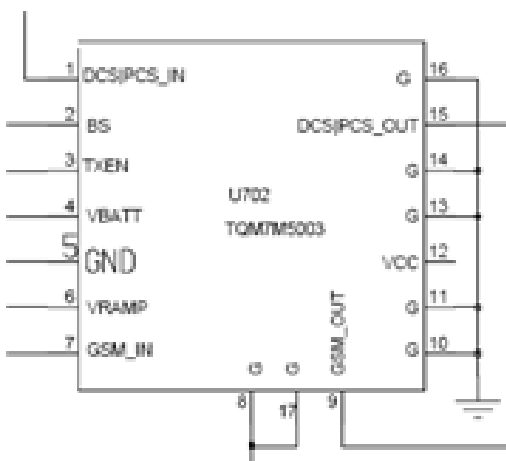
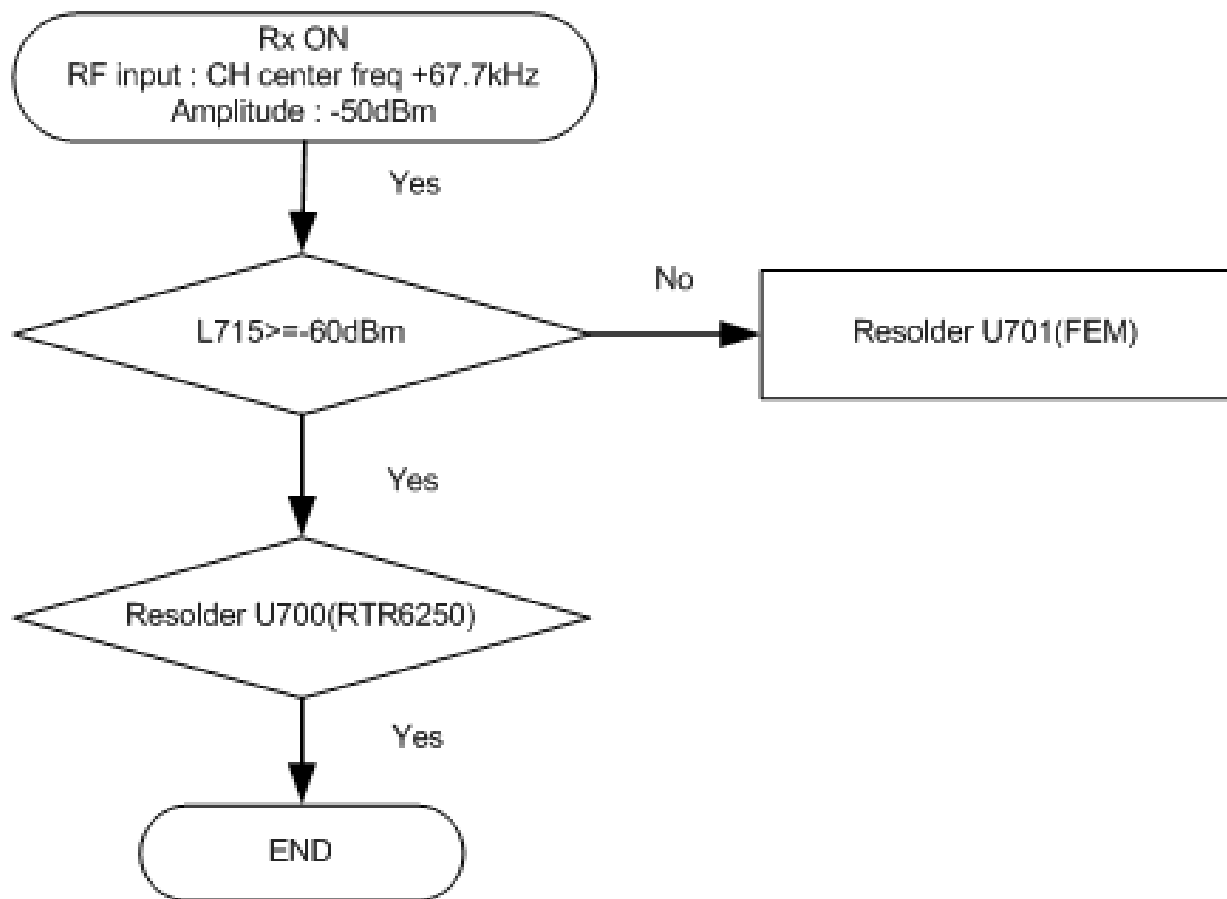


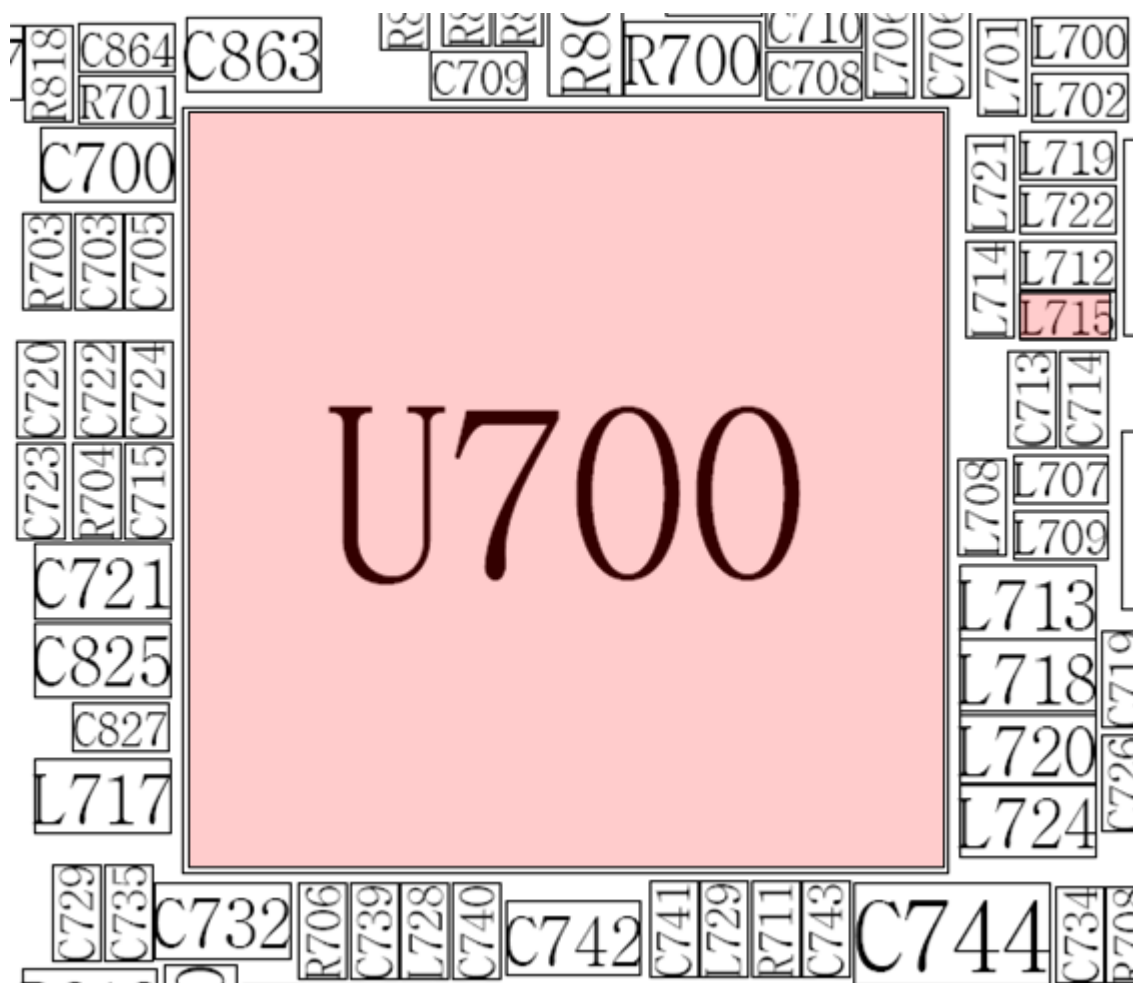
9-11. DCS Transmitter



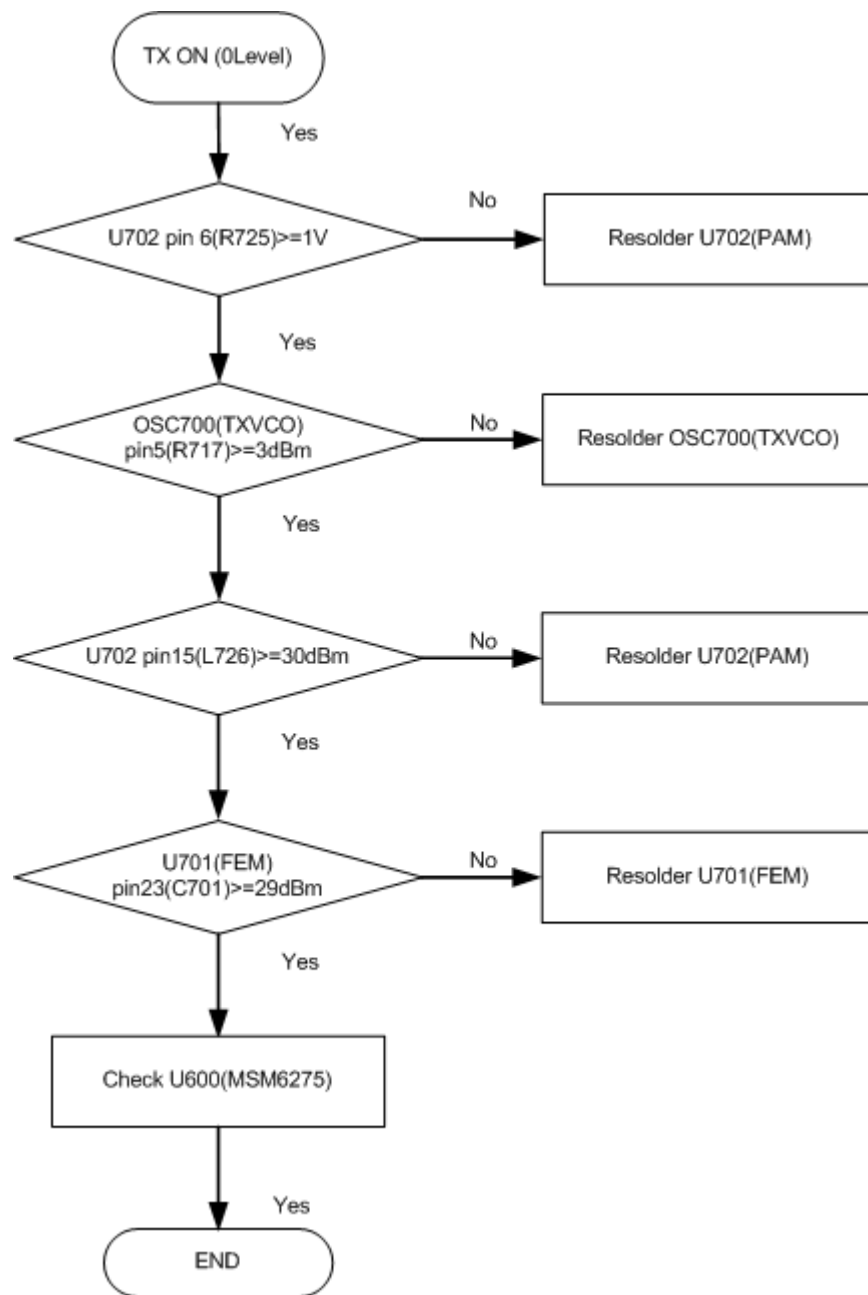


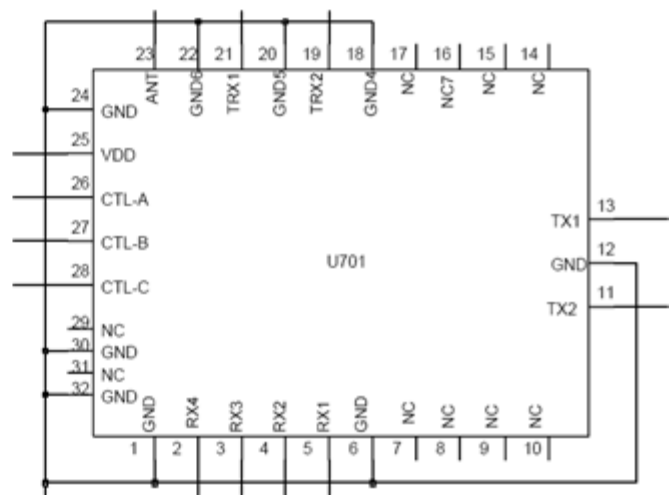
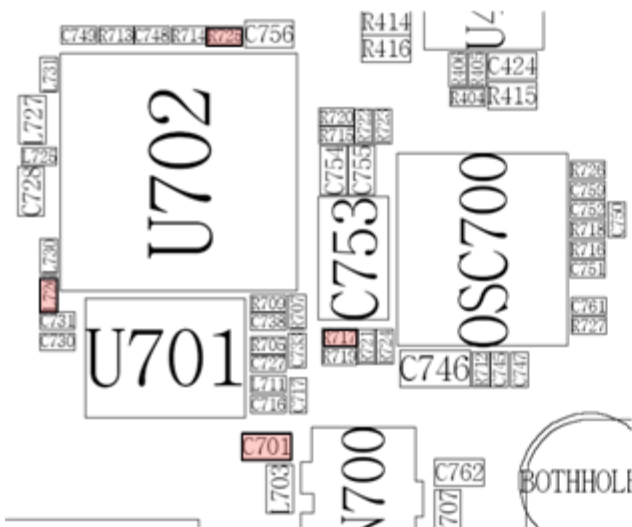
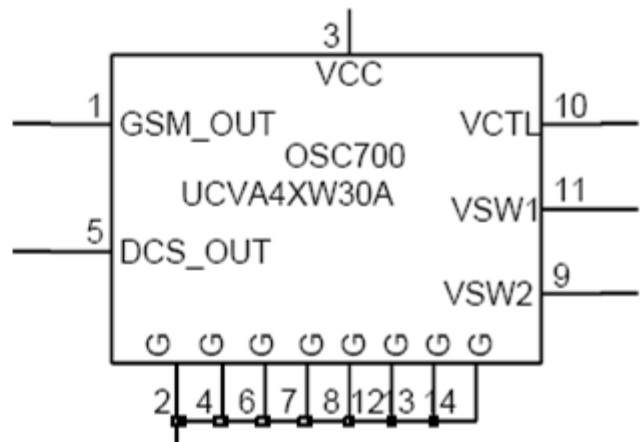
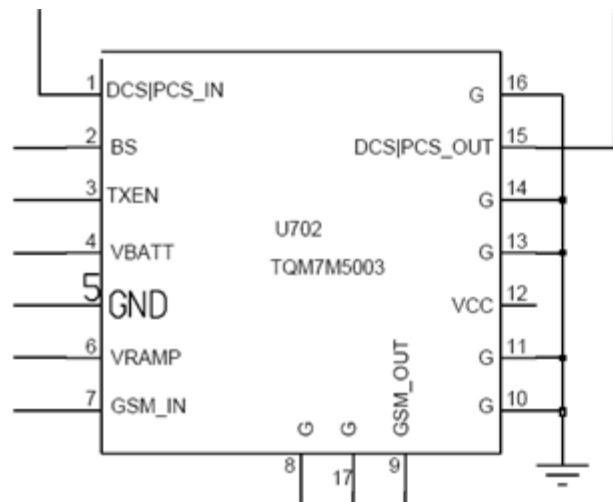
9-12. PCS Receiver



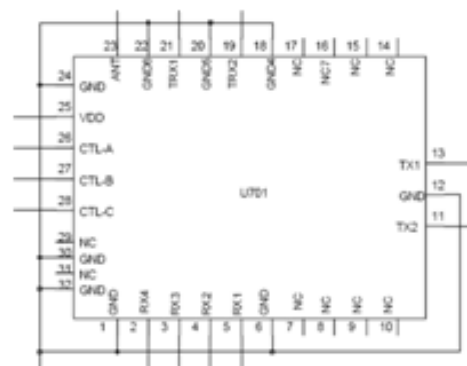
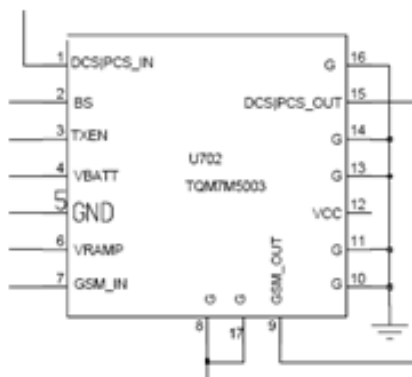
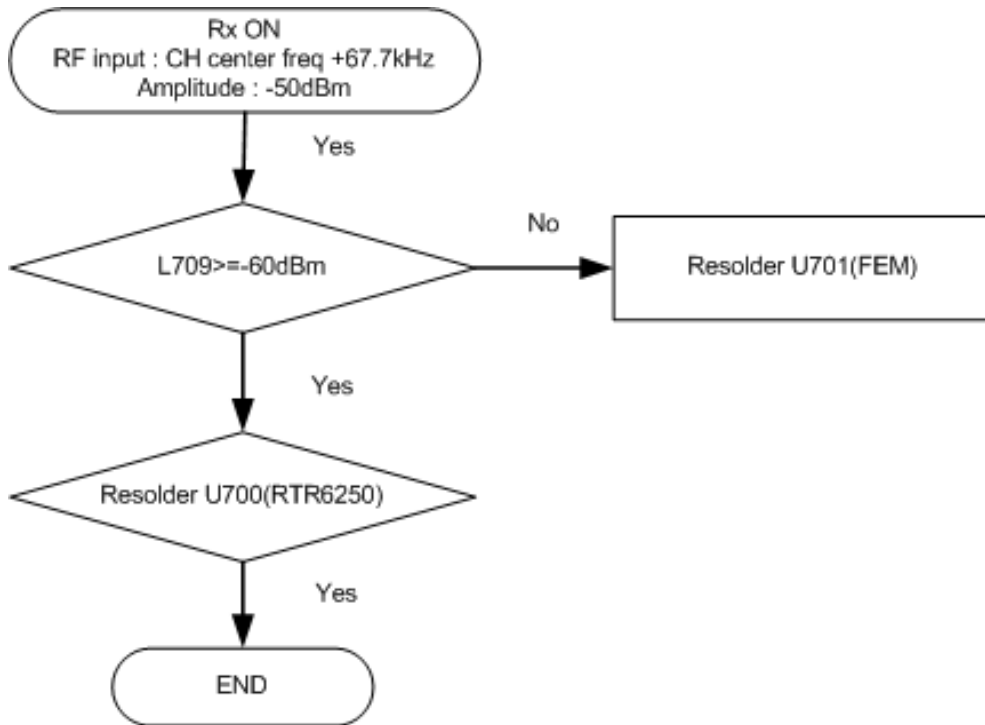


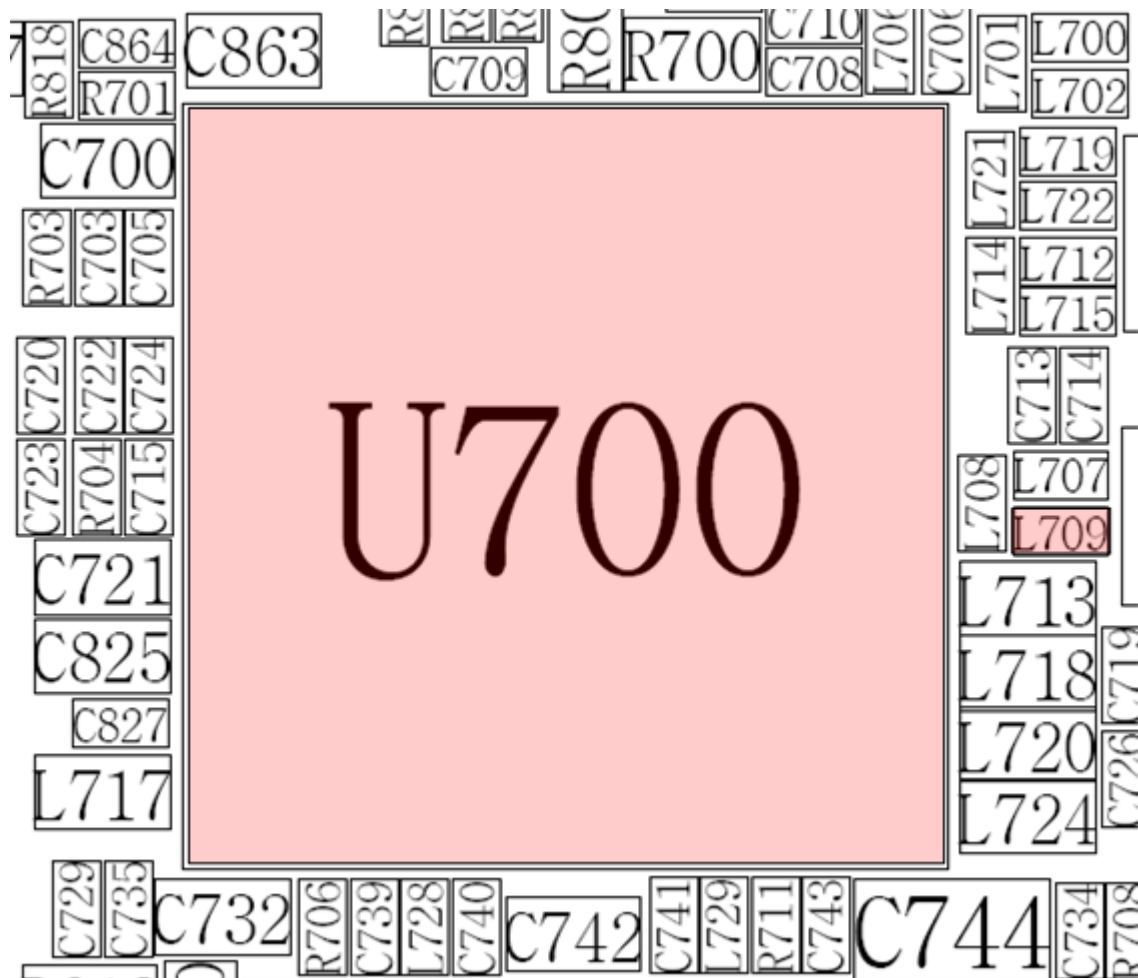
9-13. PCS Transmitter



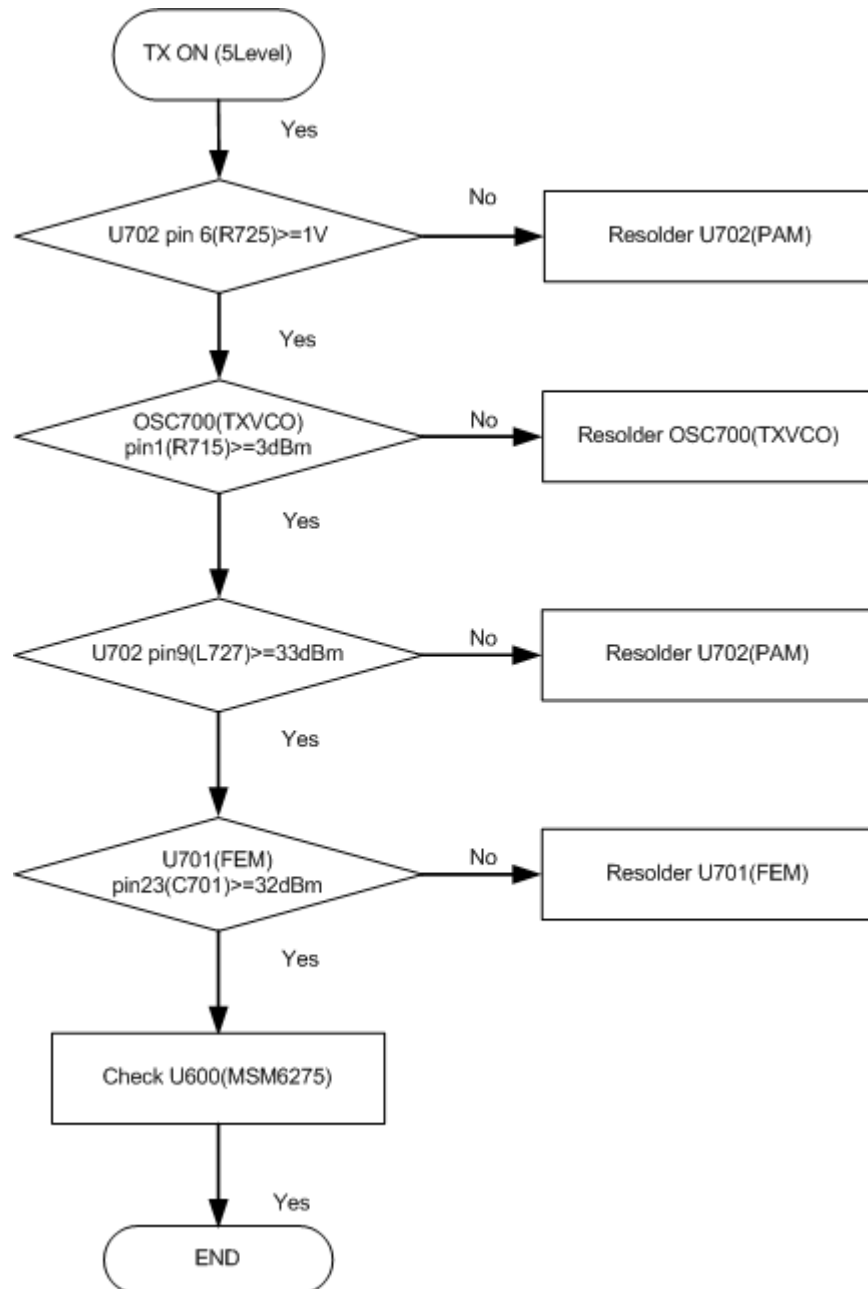


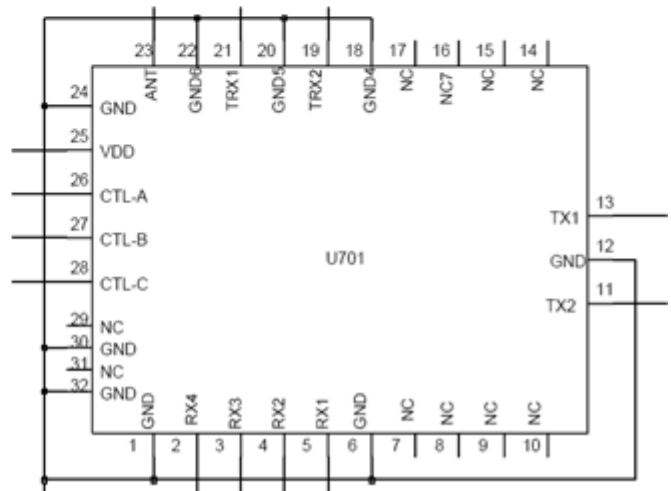
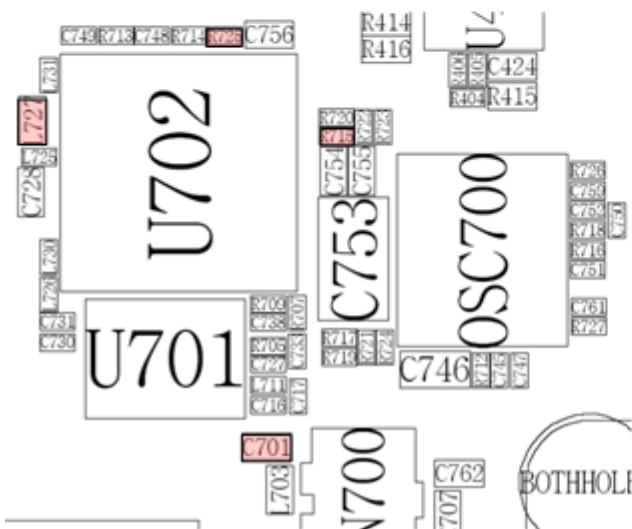
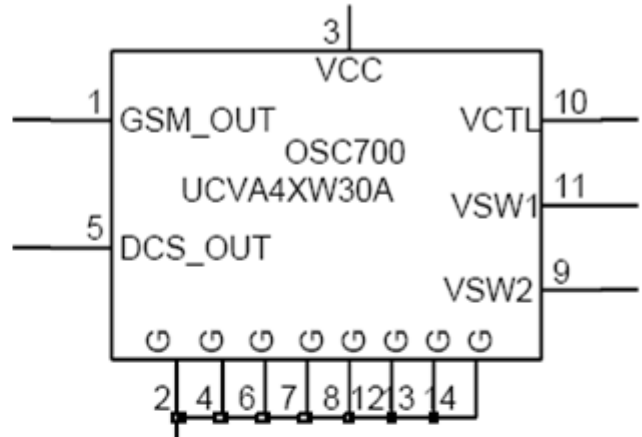
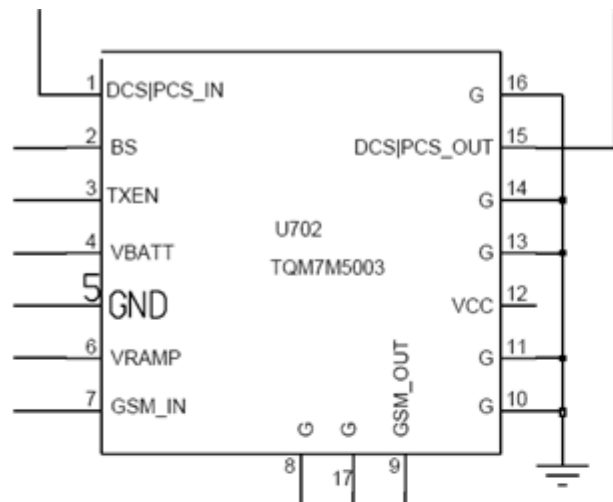
9-14. GSM850 Receiver



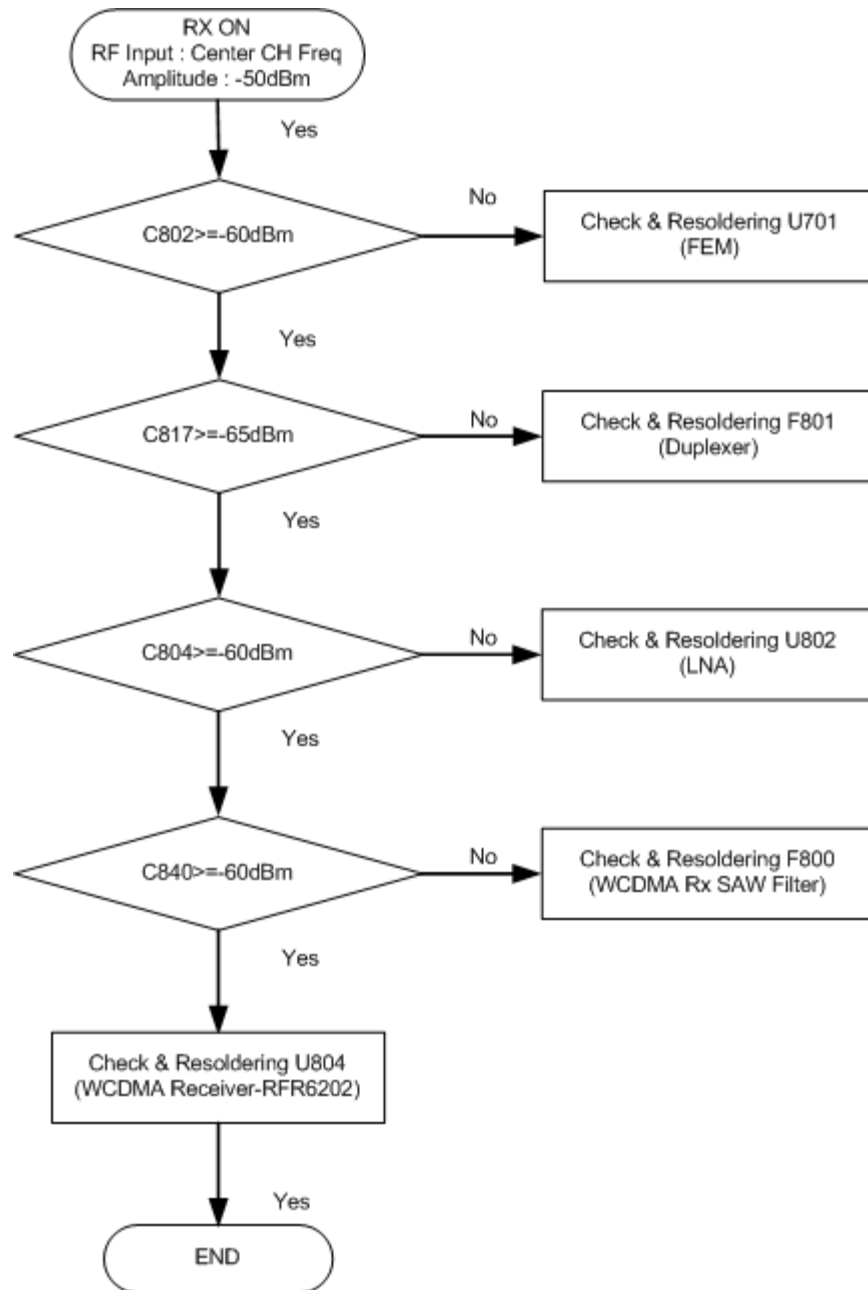


9-15. GSM850 Transmitter

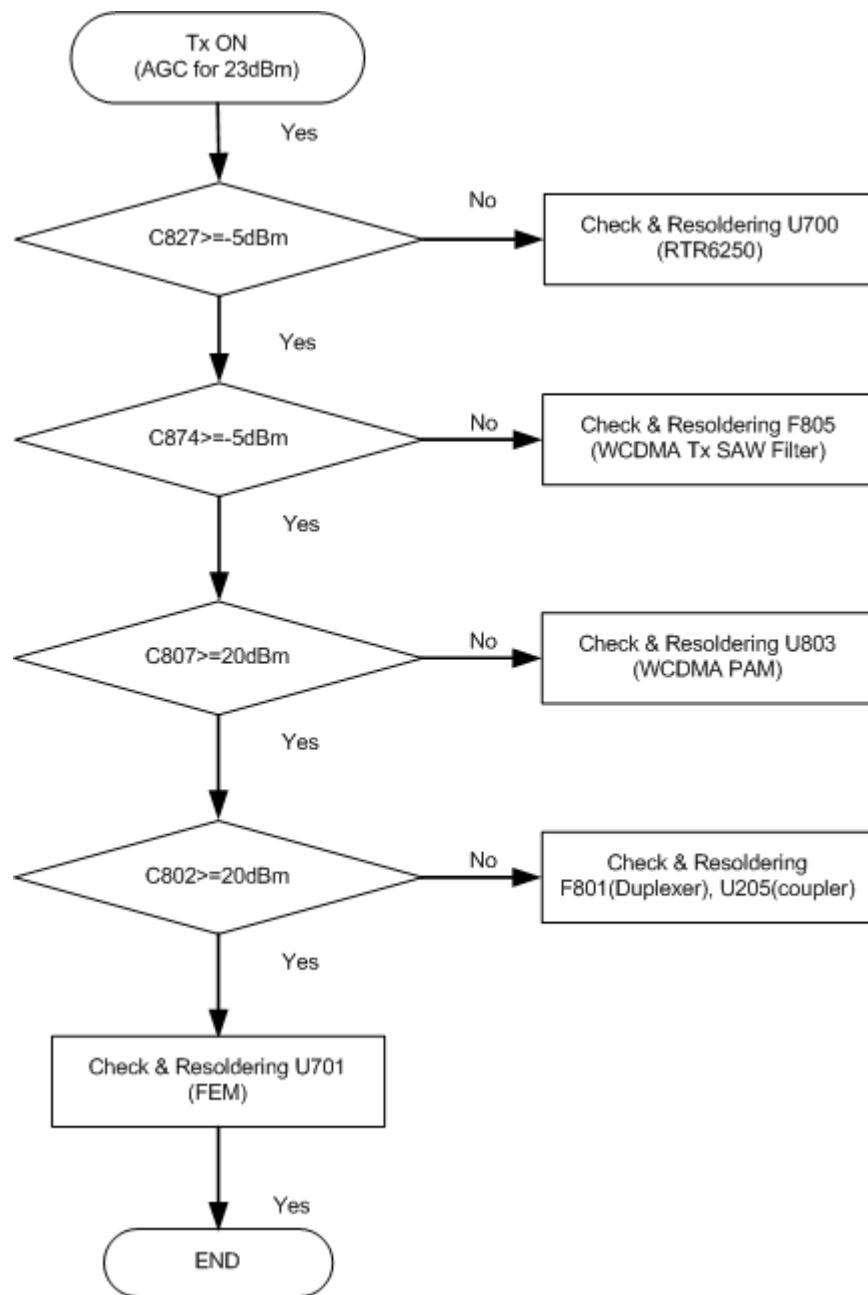


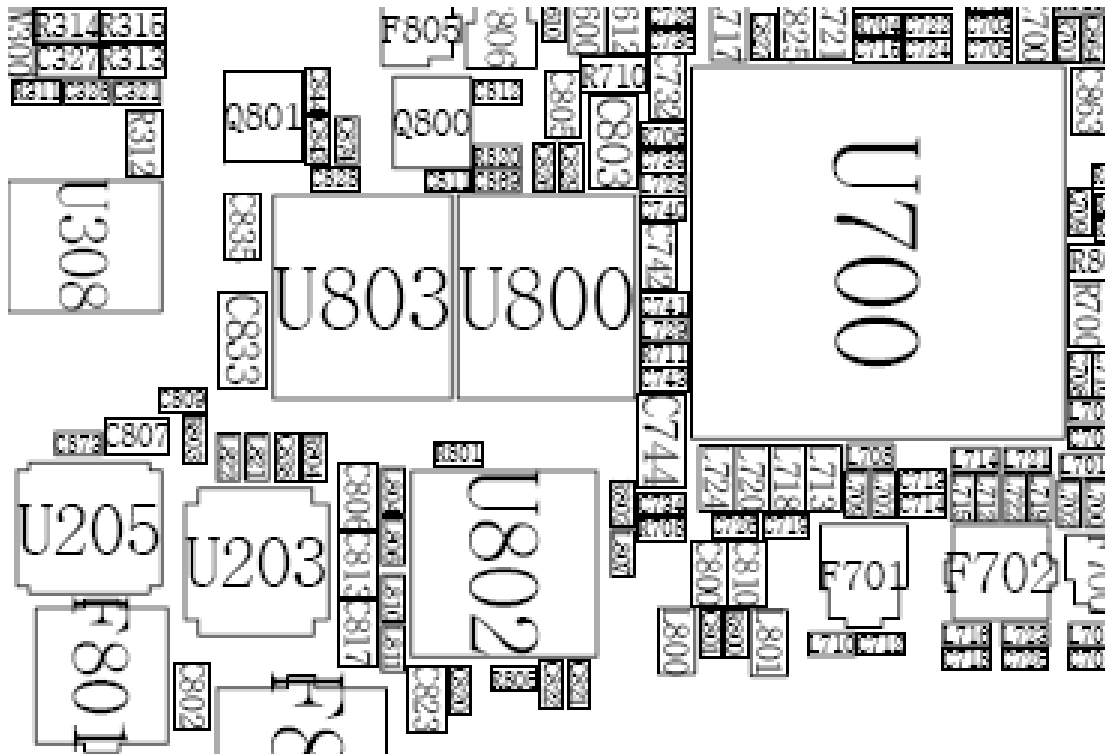
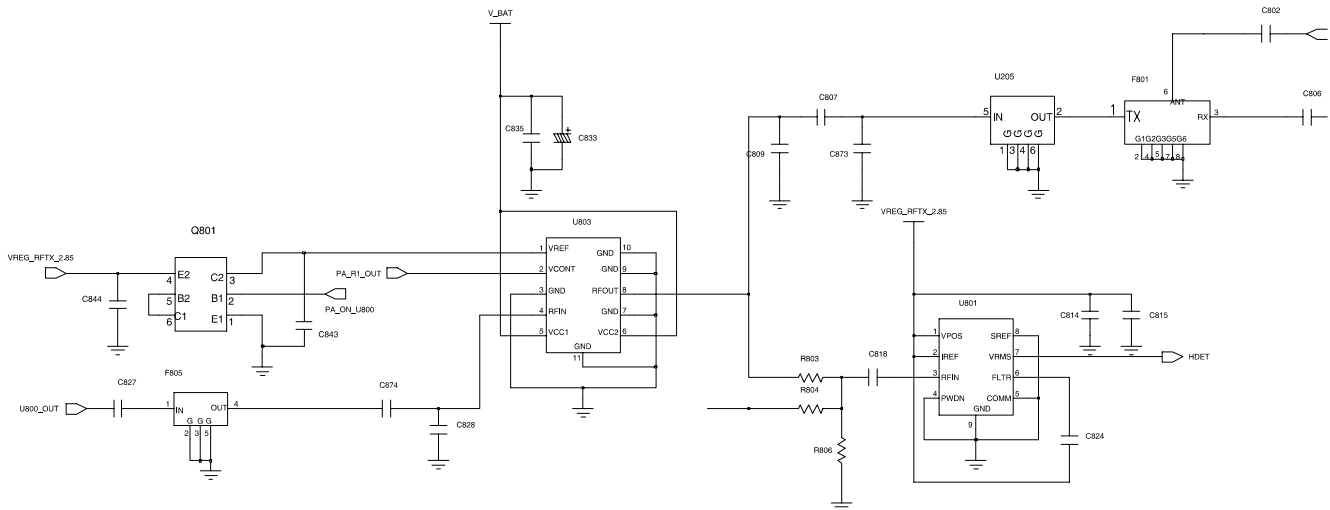


9-16. WCDMA850 Receiver

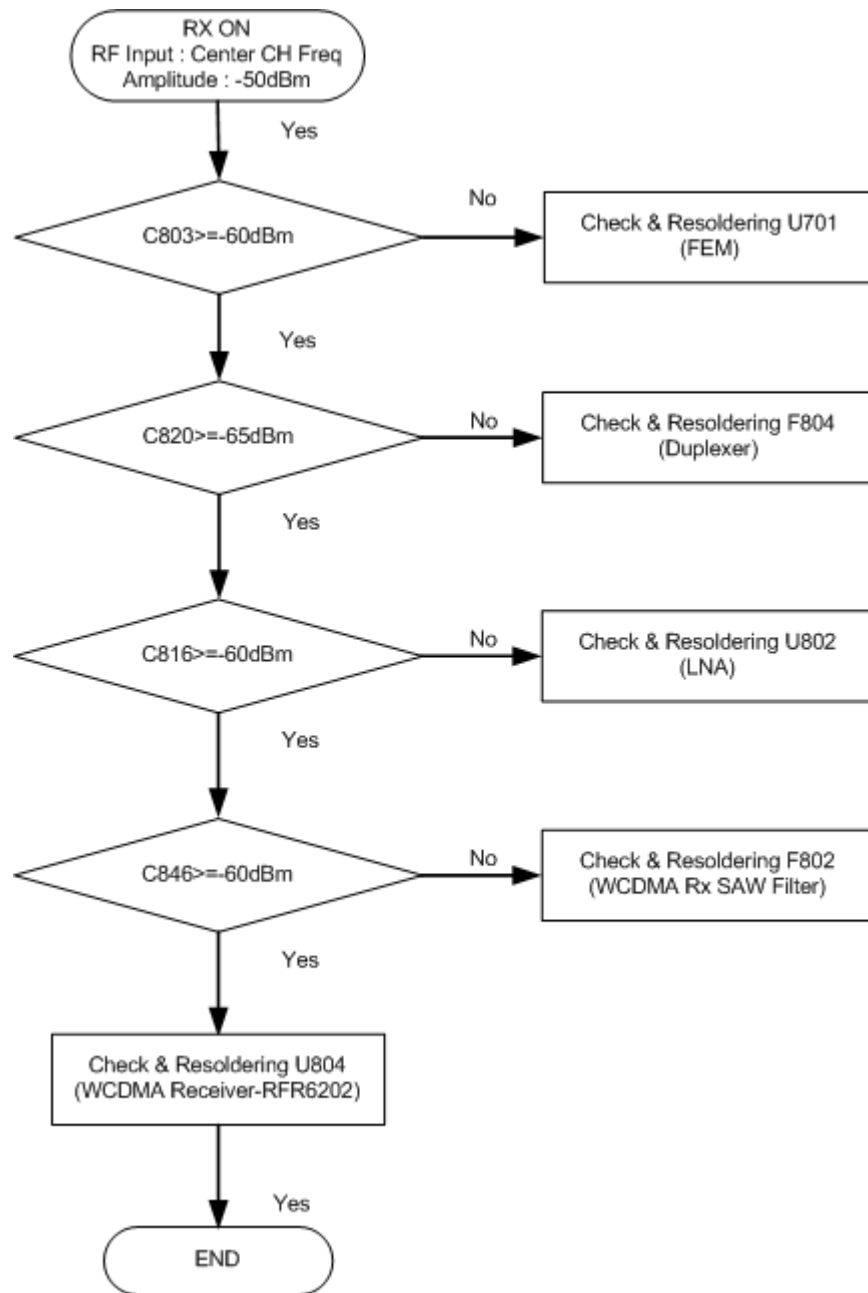


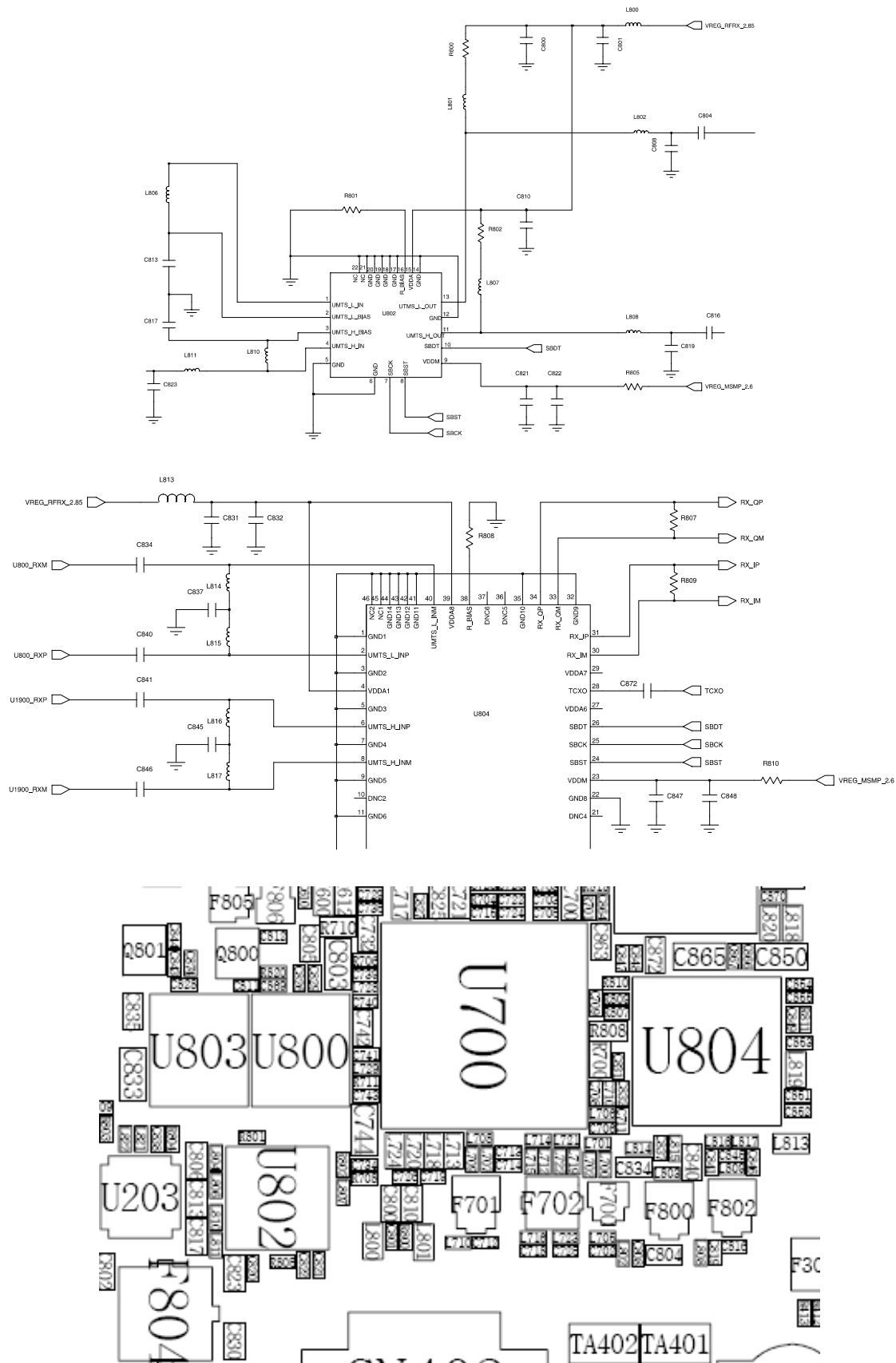
9-17. WCDMA850 Transmitter



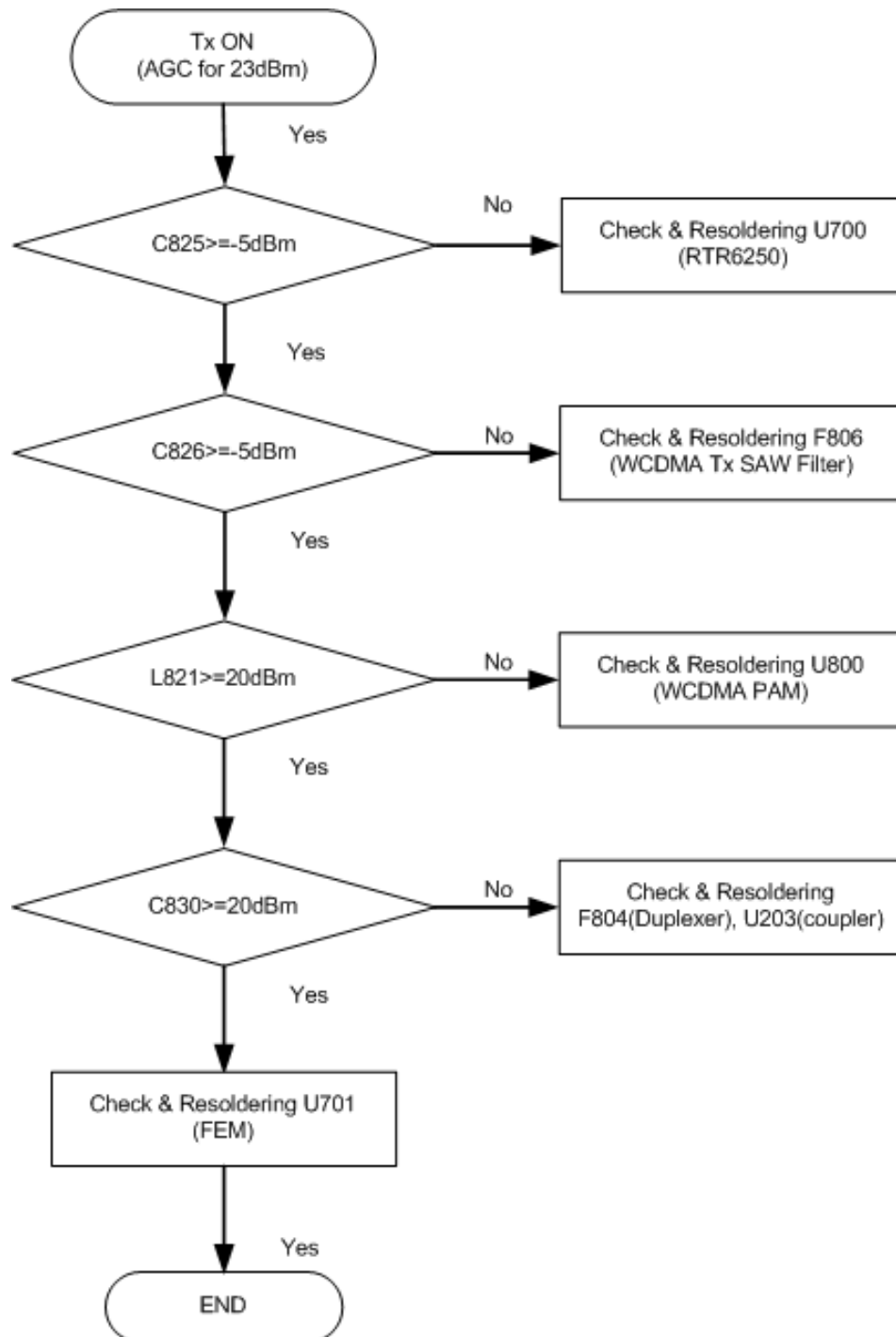


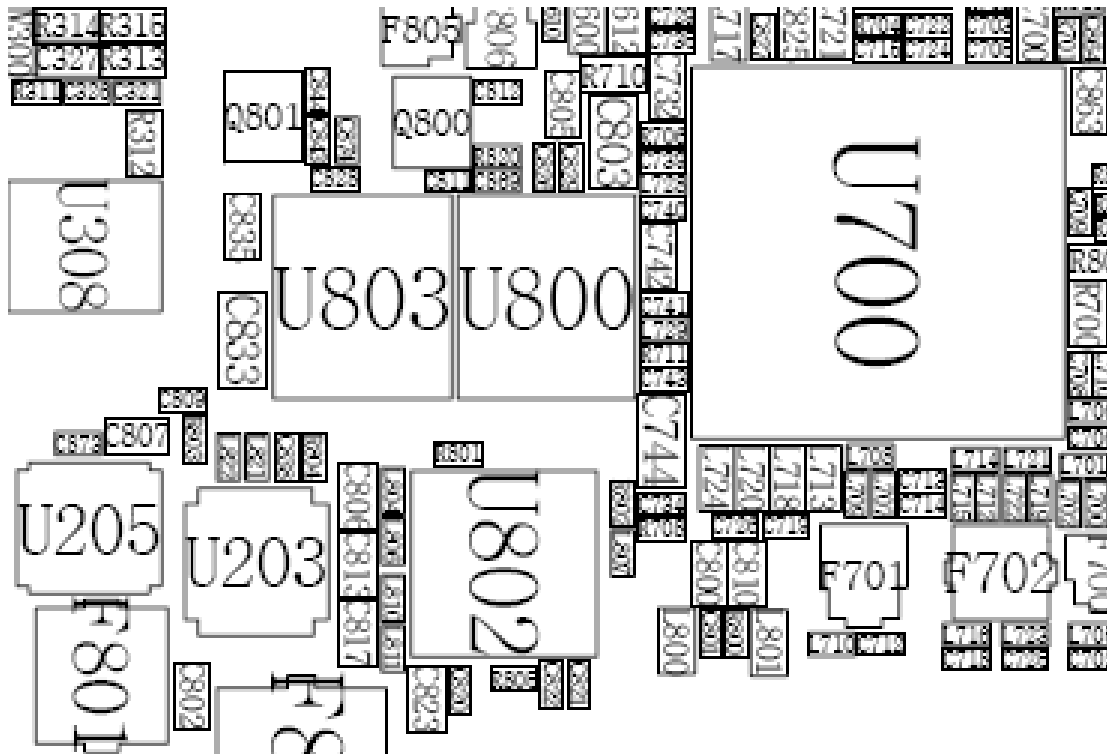
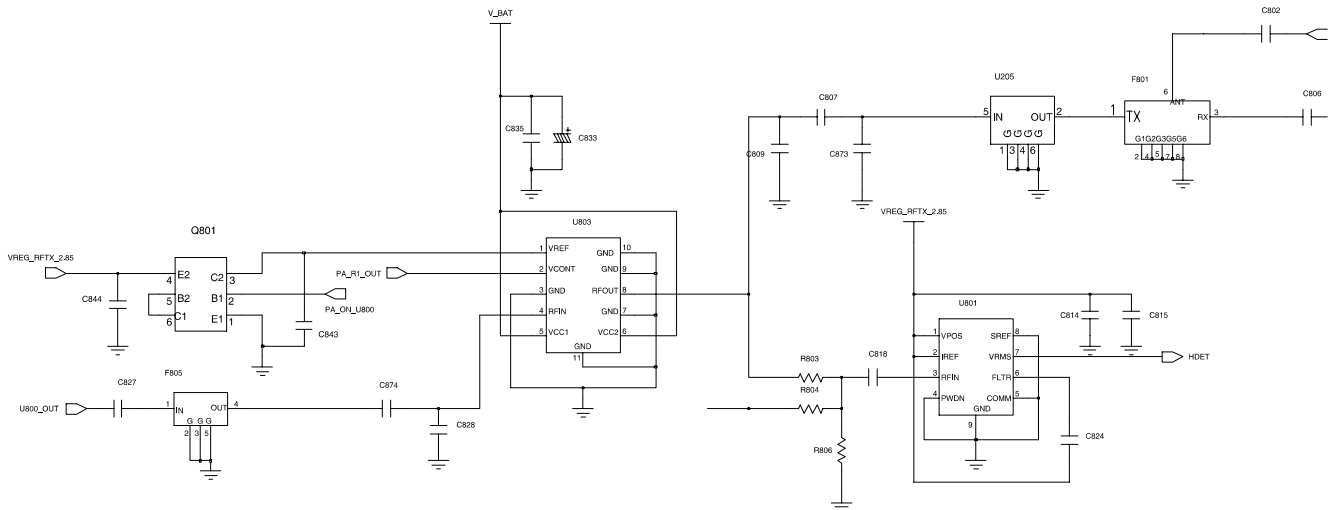
9-18. WCDMA1900 Receiver





9-19. WCDMA1900 Transmitter





10. Reference data

Reference Abbreviate

- **AAC**: Advanced Audio Coding.
- **AVC** : Advanced Video Coding.
- **BER** : Bit Error Rate
- **BPSK**: Binary Phase Shift Keying
- **CA** : Conditional Access
- **CDM** : Code Division Multiplexing
- **C/I** : Carrier to Interference
- **DMB** : Digital Multimedia Broadcasting
- **EN** : European Standard
- **ES** : Elementary Stream
- **ETSI**: European Telecommunications Standards Institute
- **MPEG**: Moving Picture Experts Group
- **PN** : Pseudo-random Noise
- **PS** : Pilot Symbol
- **QPSK**: Quadrature Phase Shift Keying
- **RS** : Reed-Solomon
- **SI** : Service Information
- **TDM** : Time Division Multiplexing
- **TS** : Transport Stream

